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ABSTRACT

This volume is the second of two documents concerning a performance-based undergraduate program for teacher education at Brooklyn College. Appendixes relating to the first volume are presented. These appendixes include position papers on teaching-learning centers, the campus media center, design for counseling services and affective education, the organization of instructional teams, liberal arts, individualized instruction, experiences, evaluation, the early childhood center, the educational clinic, and the special experimental program in early childhood. (Related document is SP 006 384.) (MJM)

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BROOKLYN COLLEGE
THE CITY UNIVERSITY OF NEW YORK
School of Education

A PERFORMANCE-BASED UNDERGRADUATE PROGRAM

for the

EDUCATION OF TEACHERS AT BROOKLYN COLLEGE

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June, 1971

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APPENDICES - POSITION PAPERS

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THE SCHOOL-COMMUNITY TEACHING-LEARNING CENTER

THE SCHOOL-COMMUNITY TEACHING-LEARNING CENTERS

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I. SUMMARY STATEMENT

The School-Community Teaching-Learning Centers

At the heart of this curriculum proposal for the education of prospective teachers at Brooklyn College is the provision for the establishment of School-Community Teaching-Learning Centers.

Each Center would consist of several elementary schools, one or more middle schools, at least one secondary school, and other community agencies in a school district. In the initial stage of implementing this total plan, Brooklyn College would develop programs at two or three centers. Eventually, there would probably be at least ten such Centers (one for each local school district in Brooklyn).

Each Center would include an educational Hub. Such a Hub would be an extension of Brooklyn College located in a separate building near the various schools and would provide facilities to augment those provided by the schools of the center. These facilities would include those required for tutoring, special classes for Brooklyn College students, educational technology, and background resource materials on the community.

Each Center would be planned to service from 300 to 400 prospective teachers.

The overall purposes of such Centers would be the following:

a. to create an integrated school-college-community training complex for both pre-service and in-service education of teachers and other professionals.

b. to adjust the present ratio of lectures to field experience time to provide opportunities for experiences which are integral parts of all proposed curricula.

c. closer college-community relations for educational planning.

d. cooperative research activities in Education.

More specific details of this overall operation are described in this paper.

II. INTRODUCTION

The School-Community Teaching-Learning Center is a conceptual scheme for the establishment of a constructive working alliance of three entities: Brooklyn College, the New York City public schools, and the Community. A Center would be a physical extension of Brooklyn College in a school district but it would also provide a functional base for service to the community of that district.

The major purpose of the Center would be to improve the quality of the education of the children and youth of the community in which it is located

by providing conditions which would improve the education of pre-service and in-service teachers in that Center.

A traditional requirement of our present teacher-training program has included what is called "observation and participation in schools and service in community centers". Our proposed new program would go far beyond this concept of service both in the provision for physical facilities and the correlative quality of experiences and research. The Center would encourage and support the development of a comprehensive and more integrated working relationship among the faculty and students of the College, the personnel of the school district and the residents of the community.

The importance of locating the Center in the community should not be overlooked. It would provide a visible and tangible expression of our desire to attend to the particular needs and special strengths of that community. It would also enable us to work closely with the schools in developing, implementing and evaluating new programs in teacher education.

III. THE NATURE OF A SCHOOL-COMMUNITY TEACHING-LEARNING CENTER

The proposed Center is a functional arrangement or complex of several components that are related to each other in various ways. The character of each Center would depend on the special strengths and needs of the faculty, schools, and community.

1. The Hub

At the heart of the Center would be the "Hub". It would be a separate facility located in the community geographically close to the schools it would service. The Hub would serve primarily as the base of operations for the Brooklyn College faculty and students. It is here that facilities would be provided to augment those in the schools: classrooms, study centers, educational technology equipment, staff rooms, and other resources that are necessary for the implementation of the program. In addition, the Hub would provide meeting rooms, available to the community and to school personnel. It may also serve as a regular meeting place of the Council of the Center: Brooklyn College, school personnel and the community representatives. If it is possible, some of the community activities would be housed in the Hub building. For example, a nursery school or a day care center might utilize some part of the building.

The Hub would be an extension of Brooklyn College in a community. It would be the place from which the prospective teachers would operate and it would serve as the nucleus which would guide the activities of the Center. In the first year of operation, there might be but 100 prospective teachers assigned but when the Center has its full complement of students it should be able to guide the activities of 300-400 students, including graduates teaching in the community.

The Hub would be the initial reception center for the prospective teacher assigned to the School-Community Teaching-Learning Center and it would serve as his base of operation for approximately two years.

The faculty of Brooklyn College who teach here would have an office and they would be part of the staff of the Center. In addition, there would be a community relations person and a librarian whose responsibility it would be to run the library and maintain a resource file. Because some educational technological equipment would be housed at the Hub, and because of the office equipment at the Hub, there would be a need for twenty-four hour custodial help. The projected program suggests also the need for the assistance of paraprofessional people to be part of the Hub staff.

The prospective teachers would plan their programs with the staff of the Hub and records developed that would record the programs, the experiences and the evaluations of the prospective teachers' performances.

The Hub would be used by the schools and by the community residents and should be able to accommodate small groups and groups as large as one-hundred-fifty persons.

In addition, the prospective teachers would be tutoring, using video-tape equipment and taking academic work at the Hub. Classrooms would be required as would be areas for the various learning activities. If we view the Hub as a place that would encourage the student to spend his extra time in the community and if the student would be assigned to a Center for blocks of time, then the Hub should have facilities, such as a lounge and study rooms, for the use of the prospective teachers.

A kitchen would be an important item, because it would service the Hub and those community activities that would be housed in or near the Hub.

The Coordinator of the Hub would be the Director of the Center. The duties of the Director of the Center are described on Page 84.

a. Summary of Facilities of the Hub

cubicles for tutoring
conference rooms
1 small auditorium
office and equipment
    typewriter
    calculators
    cabinets
    files - repository for records
classrooms
    one-way vision screen
    area for making video-tape
    area for learning activities material
equipped kitchen
reference library - educational resources
lavatories
study rooms
lounge
equipped offices for the staff

b. Staff

coordinator
secretary-receptionist
community-relations person
learning-center librarian
paraprofessionals
24-hour custodial help

c. Coordinator-Director

The Coordinator of the would be the Director of the Center.

2. The Schools

The schools in a district that would be affiliated with the Center would be selected by representatives of Brooklyn College, the District Superintendent, the Teachers' Union, and the local school board.

These schools would participate in the activities of the Hub and in the use of the facilities allocated to the Center.

Prospective teachers would utilize these schools to engage in the experiences described in the course descriptions and would service the school population in many ways during the two or more years they would spend in the community.

Each school would provide for the prospective teachers' activities by setting aside sufficient space for tutoring (at least 20 cubicles) and for storing additional instructional materials and technological equipment used in educational activities.

3. Community Activities

A unique element of the Center would be the provision for community activities: social and economic activities. They would be administered by the initiating agency but they would, because of the mutual benefits that would accrue, use the resources of the Center. For example, a neighborhood Vista program might desire to work with the Center. Several college students could be available to them for tutoring some of the adults or conducting some meetings to explain the work of the schools. In return, the students at the Center would benefit from working closely with some of the parents of the children with whom they would be in close association for two or more years.

Another activity that might be developed would be a residence unit that would provide short-term housing for a limited group of students and faculty. It could be modeled along the lines of the Vista program. A group of students and faculty might live for a period of two weeks to five months at the residence. Not only would this encourage the students to participate in the many activities of

a community but it would also present the students with an insight into the dynamics of the neighborhood.

The difficulties of securing optimal arrangements with agencies (Vista Program, hospitals, clinics, community action agencies) that service a community are not to be minimized. However, the difficulties encountered would be surely offset by the advantages the students would gain working in agencies that service the community in which they will be observing, participating, and student-teaching and, hopefully, teaching.

4. The Director of the Center

Each Center would have a Director whose office would be located at the Hub. The Director would be responsible for the successful integration of the activities of the Center. In addition he would be chairman of the executive board of the prospective Council of the Center, the liaison person between Brooklyn College and the school and community representatives and the chief fiscal officer of the Center.

IV. THE PARTICULAR NATURE OF A SCHOOL-COMMUNITY TEACHING-LEARNING CENTER

Although the general organization of each Center would be the same, the unique qualities of the community in which it is located would undoubtedly influence the Center. It would also be molded by the College and school faculties and by the social organizations or components with which it is connected. Thus, each Center, though organized along the same lines, would, in fact, be different from the others.

1. Specialization of Subjects

A Center might become noted (and thus attract faculty and students) for its special attention to the Arts. Perhaps several faculty members who were particularly competent and interested in the visual and/or performing arts would join together as a team. They would encourage their students to develop their talents in this area and to relate them to the teaching of the children and youth of that school district. This interest would, hopefully, spread to the entire community and stimulate broader interest and participation in the Arts.

Another Center might be known for its emphasis in a different area. Although each Center would be responsible for the general professional preparation of the prospective teachers at that Center, there might, for example, be special emphasis on language arts or social studies. This emphasis would be seen not only in the interests and skills of the staff and the students but also in the type of cooperative research it would stimulate.

2. Specialization of Community Activities

In addition to emphasis on specific subjects, it is also to be expected that each school district would have community activities that are substantially different from those found in adjacent Centers.

If the Centers are to reflect truly the impetus toward an experience-centered teacher preparation then each Center would have to be flexible enough to develop a style of operation that would be most appropriate for the staff, the prospective teachers, the school personnel, the children and youth, and other community residents served.

V. THE IMPORTANCE OF THE CENTERS

1. Broadening and Deepening Experiences

Many of the students at Brooklyn College are living in the areas in which they were born and have not traveled extensively. The Center would provide prospective teachers with opportunities to work with people of different ages, interests, professions, and ethnic backgrounds.

The Center would provide prospective teachers not only with first hand teaching experiences but also opportunities for working with children and youth in other important areas of living.

Working with children and youth of one community would provide prospective teachers with greater security in the teaching roles through deeper knowledge and understanding of the children and youth to be taught and their environment.

2. Closer Relationship between Faculty and Students

The opportunities for a closer, more satisfying relationship between the faculty and the prospective teachers would be increased at the Center. There would be many occasions available to the faculty to observe the students in many social as well as professional activities. Based on the observations and the close contact, the faculty member would be able to appraise more realistically the student's work. He would thus be able to suggest further experiences that would assist the student's growth and development as a professional person.

3. Improved Relationship between College Faculty and School Personnel

The situations in which the prospective teachers would be placed would be directly available to the faculty. A faculty memeber would visit a school or community agency in the immediate vicinity, learn about the particular operation, and help the students with any difficulties they may encounter.

The proximity of the College staff to the schools would permit the development of a closer relationship with the schools. The College faculty and students would be more available to the schools

and all the resources of the Center would be available to the schools. The planning and implementation of joint programs would be more easily accomplished.

4. Development of Cooperative Research

A Center would also encourage the development of cooperative research programs germane to the community. As a result of the activities in the community, research projects would be identified and the effort to develop them would be a cooperative endeavor. The researcher would be accepted because the school and the community would participate in the selection of projects that need investigation.

5. Melding of Theory and Practice

The prospective teachers would also be able to develop an understanding, to the extent that it is possible in a particular field, of the connection between practice and theory. The faculty would have a knowledge of the community and they would be able to help the prospective teachers to integrate theory and practice in the manner described in the body of this document.

6. Development of Self-Awareness

The variety and depth of experiences would help the prospective teacher develop greater self-awareness. He would be able to test himself in many situations and receive the support and guidance of the faculty in his attempts to develop his abilities. He would be able to gauge his strengths and weaknesses in many situations, and would be given opportunities for growth.

7. Development of Social Consciousness

The Center would also provide the means to help a prospective teacher develop social consciousness. The work at the Centers would assist the prospective teacher to develop a greater understanding of the social forces that affect the lives of the people in the community, and to appreciate the similarities and differences among people.

8. Social Change

The Center would maximize the possibilities for the prospective teachers, school personnel and College faculty to act as agents of social change. The Center would encourage, by the nature of its structure, the exploration and the development of methods of acting in a socially responsible fashion.

9. Improved Working-Relationship

The Center would also improve the working relationship the College maintains with the schools. Through their joint efforts, greater planning would go into the programs of the prospective teachers. The schools would have a greater number of prospective teachers

to assist in the classrooms. The students would be more available and should be better prepared to cope with the situations in which they would find themselves. The cooperative activities that would result from the closer connection between the schools and the College should prove both stimulating and professionally beneficial.

VI. THE CENTER AND ITS RESOURCES

The Center would become a vital asset to the community in the following ways:

1. Space

The space designated as meeting rooms could be used by the community for community affairs, and thus could serve as a community center or "neighborhood house". It could also serve as a cultural center for a film series for a community theatre group.

2. Faculty Service

The College staff connected with the Center could provide educational services to the community. For example, a group of parents might express a need for information about nutrition, or child rearing practices, or perhaps they might want information about preparing for citizenship. Time and knowledge permitting, the staff could arrange for some meetings with the parents. Services related to the needs of the community could also be provided by the broader College faculty.

3. Educational Service to Paraprofessionals

An additional service to the community could be made because of the proximity of the faculty to the community. Many paraprofessionals have found it difficult to continue their education because their family responsibilities prevented them from traveling to the College. By having a base in the community, the faculty might be able to arrange to give courses for College credit at the Center.

4. Consultation Services

The community activities would be able to benefit from the professional services that would be available through the Center. The staff could serve as consultants to a community day-care center or to a nursery school. The prospective teachers could be used to help staff such enterprises and themselves gain invaluable knowledge of child growth and development.

5. Identification of Community Problems

The direct involvement in the community would sensitize the staff to the short-range and long-range needs of the community, and facilitate more adequate responses. The staff, for example, might see the need for a summer program in the community and join with the

parents in developing one. The Center would also serve as a base from which the students could meet the children and youth of the community on Saturdays or Sundays for theatre groups, or tutoring, or trips to places of interest.

6. Development of Self-Awareness

The Center might also serve the youth and adults as a place for them to learn about other activities in the City and possibly to learn new skills and hobbies.

7. Implementation of Activities

There would be a gradual development of the activities of the Center and a continuing evaluation of their functions.

The Center broadly conceived would be not only the locus for the educational activities that would occur during the day, but would be the place for constructive community activities throughout the week.

VII. THE PROSPECTIVE TEACHER AND THE CENTER

1. Choice of Center

As early as possible after a student at Brooklyn College would decide to enter the Education Sequence he would select or would be assigned to a particular Center for the greater part of his work in the Department of Education. His selection might be based on the location of the Center or on the special area of concern of the Center.

2. Close Association of the Faculty and School Personnel

At the Center the student would have the time and opportunity to work closely with several faculty members -- individually and in teams. He would also be in frequent contact with school personnel, community residents, and the children and youth of the school district.

3. Variety of Educational Experiences

The Center would offer a variety of social and educational experiences that might be suggested for a prospective teacher. The determination of the type of experience and the duration would depend upon the decision reached after an assessment of the student by some members of the staff and the student himself. That is, the student's skills, attitudes, and abilities would be identified and, based on an approximate and realistic goal, activities in which the student should participate would be determined. Activities, such as tutoring or working in the day-care center would become part of his program as his assignment at the Center.

4. Individualization of Instruction

The prospective teacher would be able to assume some responsibility for his own development. Periodically the staff and the prospective teacher would evaluate his social and professional growth and

make those emendations necessary to further his development. For example, a report on a prospective teacher by his supervisor in the activity at which he is working may indicate that further work in that area is not necessary. The prospective teacher could then spend his time at some other activity or he might instead put further effort into developing a skill or talent that he believed would enhance his teaching. The decision, in any case, would be based on planning and continuous evaluation by the student and a staff of professional people. This individualization of instruction should make the student's experience at the Center unique and professionally stimulating.

5. In-Depth Experience

For the most part, the prospective teacher would take his work at one Center. His work would, therefore, be done in one community and the student would benefit from this in-depth experience in one school district. The student would thus gain a deeper understanding of the social forces impinging on the community and the children and youth for whom he would eventually have full responsibility in the school.

6. Accountability of College Staff

Although there would be many experiences in other agencies and institutions, it should be stressed that the responsibility for the growth and the development of the student's skills and competencies as a professional person is ultimately an educational one and it is the College staff who would be responsible.

VIII. THE PROSPECTIVE TEACHER AND THE HUB

As early as possible, preferably in his lower sophomore term, a student would begin his work at a School-Community Teaching-Learning Center. He would report to the Hub of the Center and meet the staff. During the orientation period he would meet the other prospective teachers and those who were in their second year. The instructional team might at this time have conferences with the prospective teacher so that they could appraise the prospective teacher's skills and competencies. The prospective teacher might be asked to perform some task or take some tests. A determination would then be made of the experiences he should have and the skills he might begin to acquire. Specific decisions would be made by the instructional teams in the course sequences.

The prospective teacher would become part of a team of second year students and some faculty members.

By individualizing instruction the program would allow prospective teachers to have intensive experience in one area and omit something in other areas in which they have competence. As another part of his preparation, the student would do some work in group dynamics and tutor children.

No matter what the student's program is like, he would be guided to evaluate continuously his progress and to help decide what needs to be altered or included in order for him to develop into a professionally competent person.

IX. THE SCHOOLS AND THE HUB

This program would encourage a closer working arrangement between the schools and the College. The facilities at the Hub would be used by school personnel. They might come to the Center for course work or for meetings with the community. They would participate in the evaluation of the prospective teachers and would meet with the faculty to plan needed research. The library, containing materials about the community and other resource material, could also be of assistance to them.

There would be much work done by the prospective teachers at the schools. It would be necessary for the schools to set aside three rooms in each building for the use of the College. One room would be used for videO-tape storage and one of the others would contain space for materials used in the courses.

X. BUS SERVICE

A bus service should be provided for the Centers to connect them to one another and to Brooklyn College. It would be of vital importance that the students and the faculty not be isolated from the College campus and its resources.

XI. THE CENTER COUNCIL

Although each unit of the Center would be responsible for the administration of that unit it would be necessary, for the successful integration of common activities, for a council to be established. This prospective Council would include representatives of the College, the schools and the community.

The prospective Council would approve of research projects and act in an advisory capacity not only by establishing priorities for these projects but also for other activities of the Center.

XII. GOVERNANCE OF THE CENTERS

A description of the administration of the Centers will be found in a document on structure which is to be prepared separately from this curriculum document.

XIII. CHARTS

Figure 1. - School Districts, Borough of Brooklyn, 1970

Figure 2. - School-Community Teaching-Learning Center; schematic design

Figure 3. - School-Community Teaching-Learning Center; Council of the Center

Figure 1. School Districts, Borough of Brooklyn, 1970.
(10 Districts)

Figure 2. School-Community Teaching-Learning Center: schematic design.

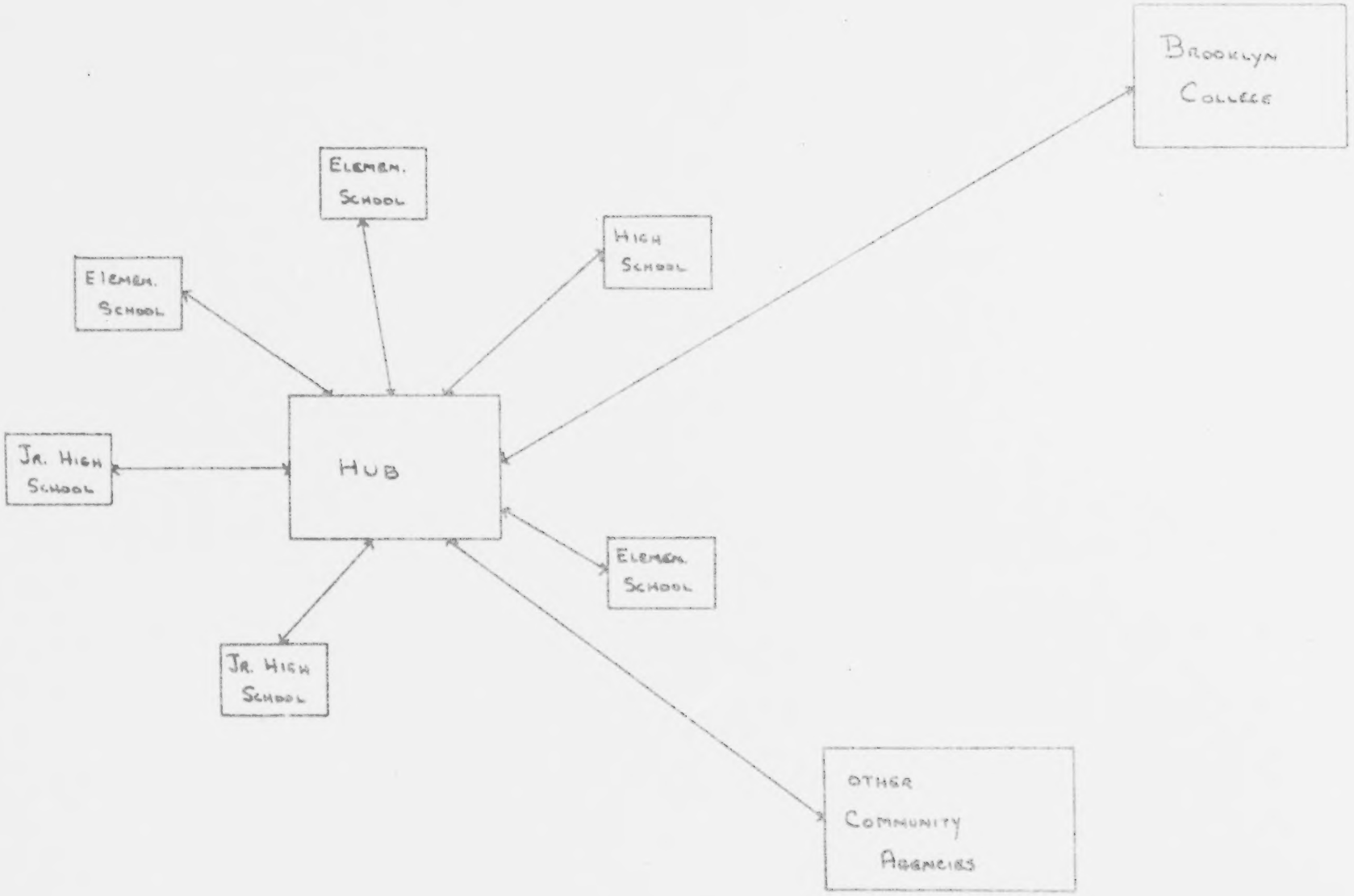
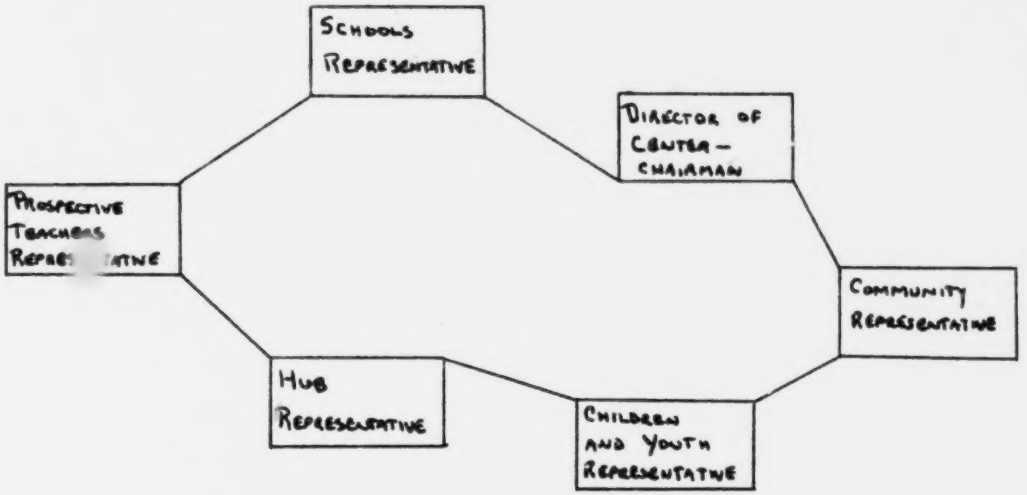


Figure 3: School-Community Teaching-Learning Center: Council of the Center.



A P P E N D I X B

THE CAMPUS MEDIA LEARNING CENTER

The Campus Media Learning Center

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THE CAMPUS MEDIA LEARNING CENTER

I. INTRODUCTION

The Campus Media Learning Center would be an on-campus educational complex which would provide for individualization of instruction and independent study for teacher trainees, as well as opportunities for teacher trainees to develop facility in the use and application of aspects of Instructional Technology in the teaching-learning process. The Center would also provide records of real life situations of neighborhood activities, resources, and subcultural patterns for study by prospective teachers. It would be equipped with the resources and instructional staff needed for the development, production, and evaluation of innovative programs and procedures in Instructional Technology.

In addition, the Center would provide a means of assessing prospective teacher behaviors, cognitive, affective, social, and a means of assisting prospective teachers in strenghthening specific behaviors: The complex would include a system for recording prospective teachers' experiences; would maintain records of previous learnings and would relate these learnings to those objectives, for each curriculum level, which are to be mastered by the prospective teachers.

The Center would provide a broad foundation for educational research and development which could be initiated by faculty members and prospective teachers. Continuing evaluation of the activities of the Center through research would be vital both to the maintenance of the Center and to the quality of instruction in the schools and in the Department.

II. THE DIVISIONS

The Campus Media Learning Center would be composed of eight divisions: programmed instruction division; teaching-learning systems division; learning materials and resources division; educational television; film and sound division; graphics division; dial access retrieval division; and, service division. The first seven divisions would be primarily instructional in their functions with a focus on the individualization of instruction and self-study. The eighth division would be concerned with the up-keep of the equipment and materials of the Center. The specific purposes, functions, equipment, and staff of each division are detailed in the following sections.

Campus Media Learning Center

1. Programmed Instruction Division.

a. Purpose. The Programmed Instruction Division would provide the facilities for individualization of instruction and independent study through the use of varieties of programmed instruction, including computer-assisted instruction. This Division would establish liaison with the Department of Information Science for the use of the College computer-assisted instruction facility. In the Center would be housed a variety of computer-managed instructional units.

This Division would be responsible for in-service type of instruction for College staff who would be interested in developing software for use with any of the programmed instruction units.

b. Facilities and Equipment.

1. Eight rooms containing 25 terminals each, or a total of 200 terminals for computer-managed instruction.
2. Lesson access systems room for terminals.

c. Staff.

1. Supervisor of Programmed Instruction Division.

2. Assistant Supervisor: liaison with College facilities.

Assistant Supervisor: in-service instruction in preparation of stoftware for units.

3. One secretary; two clerk-typists.

4. Four operators (two for day period; 2 for evening).

5. One site manager (with system and programming experience).

d. Remarks.

This Division would operate 14 hours a day, five days a week; one-half day on Saturdays.

2. Teaching-Learning Systems Division.

   a. Purpose: This Division would provide teacher trainees either independently or in small groups, with the opportunity of studying and/or developing video-taped behavorial situations involving children and youth to illustrate specific teaching-learning systems. Further cxperiences would include micro-teaching and simulation work as well as the use of learning programs for College courses which include sound/slides, movies, or filmstrips as media of concept presentation.

   b. Facilities and Equipment.

      1. Ten rooms each containing 25 carrels and monitors for each carrel, or a total of 250 carrels and monitors.

      2. Dial access program recall.

      3. Audio-video program source and distribution systems (similar to RCA Learning Systems).

      4. Slide, movie/sound source distribution systems (similar to materials developed by Chester Electronics, Inc.).

   c. Staff.

      1. Supervisor of Teaching-Learning Systems Division.

      2. Assistant Supervisor.

      3. One Secretary and one clerk-typist.

      4. Two operators (one, day; the other evening).

3. Learning Materials and Resources Division.

   a. Purpose: This Division would be designed to support teacher trainees investigating and exploring uses for different types of learning programs which could be presented through the media of Intruction Technology. In this Division teacher trainees would locate, review, and evaluate materials that would be useful to them in their

Campus Media Learning Center

experiences in School-Community Teaching-Learning Centers(1).

b. Facilities and Equipment:

1. Room I: teaching machines used to aid children in the learning process, e.g., The Hoffman Reading Program, Avidesk, Language Master, Cook Learning Machine.

2. Room II: materials and machines that use electronic devices for their presentation, but are not designed for student responses, e.g., overhead projector, 8mm single concept loop projector and film, 16mm projector, sound/film strips, 35mm slides, records, cassette tapes, transparencies.

3. Room III: 30 dial access monitors and carrels which would permit teacher trainees to view textbooks in various grade level and subject areas.

4. Room IV: 3-dimensional objects and flat materials, e.g., photographs used in Early Childhood Education.

c. Staff:

1. Supervisor of Learning Materials and Resources Division.

2. Assistant Supervisor

3. One secretary; two clerk-typists.

4. Two operators.

d. Remarks:

1. These rooms could be used by the Center's teaching staff to demonstrate aspects of Instructional Technology: the equipment and their functions in the teaching-learning process.

2. Micro-copying would be available to reproduce textbooks and materials used in some types of College instruction to save filing the books for reference. The copies of these books would be viewed on the dial access monitor.

(1) see Appendix A, School-Community Teaching-Learning Center.

Campus Media Learning Center

4. Educational Television Division.

a. Purpose: This Division would provide facilities for video-taping events and happenings in neighborhoods, public schools, and city resource centers. It would also enable College staff and prospective teachers to record on video-tape categories of teaching-learning situations which could form a foundation for helping the prospective teachers develop skills in applying concepts necessary for analyzing and interpreting these situations quickly and thoroughly.

This Division would produce micro-teaching situations and instructional television programs. The Division staff would work with College staff on development of micro-teaching units and in the training of College staff members in the use of portable television equipment.

This Division would work cooperatively with the College Television Center in the development of facilities to avoid duplication.

b. Facilities and Equipment:

1. One large television studio; one small television studio.
2. Three color television cameras for large studio; two for small studio
3. Lighting for both studios.
4. Recording and sound facilities.
5. Sound and taping control facilities.
6. Facilities for closed circuit television.
7. One completely equipped Mobile Television Unit.

c. Staff:

1. Supervisor of Educational Television Division.
2. Assistant Supervisor: liaison with College Television Center.

   Assistant Supervisor: Center administration.
3. Four technicians.
4. One secretary; two clerk-typists.

Campus Media Learning Center

5. Film and Sound Division.

Film Production

a. Purpose: This unit would produce original 35mm slides, filmstrips, transparencies, super-8mm and 16mm movies. It would also reproduce slides and filmstrips, and copy some books, including basal readers and other texts.

b. Facilities and Equipment:

1. Room I: for production of 35mm slides and filmstrips; equipped with three Lieca copy machines, two Polaroid PP 3 Land Cameras for large negative copies.

2. Room II: for copying books and other printed materials; equipped with three micro-copy cameras.

c. Staff: See note following description of Sound Production Unit.

Sound Production

a. Purpose: This unit would record original sound for sound/filmstrip or sound/slides, or for audio programs developed by teacher trainees and instructional staff members.

b. Facilities and Equipment:

1. One recording studio

2. One sound production room

3. Recording unit similar to Ampex tape recording unit

c. Staff:

1. Supervisor of Film and Sound Division.

2. Assistant Supervisor

3. for Film Production Unit:

a. three photographic technicians

b. one secretary; one clerk-typist

4. for Sound Production Unit:

   a. one sound production technician

   b. two clerk-typists

6. Graphics Division.

   a. Purpose: This division would support the production of materials developed by teacher trainees, especially materials for individually prescribed instruction, for use in the School-Community Teaching-Learning Centers. It would also support production of materials designed by the instructional staff.

   b. Facilities and Equipment:

      1. One large graphics production room; two smaller rooms for titling, printing, etc.

      2. Complete equipment for graphic productions in terms of flats, 3-dimensional objects for educational television, and photographic division.

   c. Staff:

      1. Supervisor of Graphics Division.

      2. Assistant Supervisor

      3. Four graphic technicians.

      4. One secretary; two clerk-typists

7. Access Retrieval Division.

   a. Purpose: The Access Retrieval Division would include a Dial Access Program Recall System. There would be at least 250 dial access terminals located in 20 rooms in the Center. A user would be able to go to a terminal and"dial" and view an assigned topic or unit. For example, a student could view a video-lecture given by a professor at another campus, or a commercially produced film on child behavior, or one of an instructor's lectures they had missed. This Division would be in operation 14-hours a day, Monday through Friday; one-half day on Saturday.

b. Facilities and Equipment:

1. Nine rooms each containing 50 Dial Access Retrieval Systems totaling 250 units.

2. Storage facilities for lesson and resource materials.

c. Staff:

1. Supervisor of Access Retrieval Division.

2. Assistant Supervisor

3. Four technicians (two, day; two, evenings).

4. One secretary; two clerk-typists.

d. Remarks:

This Division would service 250 monitors placed throughout the Center. These facilities could be used to their capacity by the 2,000 undergraduate students enrolled in courses in the Department of Education and by the students in the Department's Graduate Division.

8. Service Division.

a. Purpose: This division would maintain and repair all audio/visual equipment in the Center.

b. Facilities and Equipment:

1. One large service room for repairs of visual and audio equipment.

2. Audio and visual testing and repairing equipment.

c. Staff:

1. Supervisor (service manager) of Service Division: non-instructional line.

2. Four technicians.

3. One clerk-typist.

Campus Media Learning Center

III. INSTRUCTIONAL FUNCTIONS

The Campus Media Learning Center would form the foundation and would provide the facilities and programs for individualization of instruction and self study. It would also provide the base where a prospective teacher could learn about the uses and applications of the various aspects of Instructional Technology.

The staff members of the Campus Media Learning Center, individually and in teams with other instructors, would teach the theories and applications fundamental to Instructional Technology.

In order to accomodate the large number of classes and approximately 2,000 students who would make use of the Center during a semester, the concept of modules of learning would be used by the Center's staff.

1. Learning Modules.

Modules of learning would be designed to meet needs of the specified courses. These modules would explore and develop applications of Instructional Technology in the light of the requirements and objectives of each course in the Education Sequences. In the basic Education courses, Instructional Technology experiences would be directed to procedures, methods and materials of instruction used to meet the needs of individuals and small groups of children and youth, the processes of developing programs for individually prescribed instruction, and the philosophy of integrating technology with traditional teaching methods and procedures. In subject area methodology courses, such as Language Arts, Mathematics, Social Studies, and Science, the concepts of learning modules would be more detailed and the concept elements would be directed toward the applications of Instructional Technology to the specific skills and knowledge required for that particular subject area.

In addition to meeting the needs of the prescribed curricula the Department of Education would offer three elective courses at the undergraduate level on Instructional Technology which would be housed in the Campus Media Learning Center. (For description of these courses, see Appendix A.)

2. Teaching and Seminar Rooms.

The nature of the assigned activities of the Campus Media Learning Center would require specially designed rooms for teaching and seminars.

Campus Media Learning Center

a. Large General Assembly Rooms.

1. Purpose: These rooms would be used for large group presentations of learning modules in Instructional Technology. These rooms could also be scheduled for special undergraduate and graduate courses.

2. Facilities and Equipment:

a. Complex of four "auditorium" rooms each seating 100 people.

b. These rooms would be joined to a projection center in the middle of the complex which would provide visual/audio presentations through the use of a rear view projection screen facing each of the rooms (see diagram, page).

c. The projection room would contain (1) two 16mm projectors, (2) four 8mm projectors, and (3) four slide and filmstrip projectors. Further, the projection room would be equipped with sound control systems for each of the assembly rooms.

d. Two portable television cameras would be part of the equipment and would be used for showin teacher demonstrations with children or youth, or for close-up observation of table demonstrations.

b. Teaching-Learning Systems Seminar Rooms.

1. Purpose: The requirement that teacher trainees prepare learning materials for students whom they teach in the School-Community Teaching-Learning Centers would demand a team instructional approach to planning and making learning programs to be used to meet the specific needs of the student(s) who would be taught by the trainee.

2. Facilities and Equipment:

a. Ten teaching-learning system conference rooms.

b. Each room would contain a monitor for the Dial Access System (see description of Division 7: Access Retrieval System, page).

c. Each room would contain a conference table and seats for ten people.

c. Behavioral Situation Seminar Rooms.

1. Purpose: The study of micro-teaching situations completed by teacher trainees in the School-Community Teaching-Learning Centers would require small conference rooms where the prospective teacher(s) and an instructor or an instructional team could view and discuss the recorded teaching situations. These conferences would require some privacy because of the quality of involvement of the prospective teacher(s) in seeing and discussing his (their) behavior in teaching-learning situations.

2. Facilities and Equipment:

a. 20 Behavioral Situation Conference Rooms.

b. Each room would contain a monitor for the Dial Access System (see description of Division 7: Access Retrieval System, page).

c. Conference table and five chairs; removable partitions in each room so two rooms could be combined for larger group.

IV. ADVISORY PANELS

Advisory panels for the Campus Media Learning Center would provide the mechanism for (1) meeting the needs of children and youth in today's schools, (2) keeping up-to-date on the constant changes taking place in urban areas, and (3) maintaining a forward look in the development of Instructional Technology equipment and programs. Three panels would be suggested:

1. Community, School, and College Advisory Panel. This Panel would be composed of members representing community groups, public school teachers and administrators, and College staff members.

2. Industrial and College Advisory Panel. This Panel would include representatives of Instructional Technology equipment manufacturers and commercial developers of learning programs, and College staff members. At times, public school and community leaders would meet with this Panel to discuss mutual educational interest and needs.

3. Intra-College Advisory Panel. This Panel would be composed of instructors from the Divisions with the Liberal Arts College. The members of this Panel could advise the Center on ways to broaden its goals and activities to meet the needs of the total College population.

The Director of the Campus Media Learning Center would be chairman of each of the three Panels.

An Advisory Panel meeting room would be planned at the Campus Media Learning Center. This room would provide necessary facilities for meetings with representatives of the three Advisory Panels. It would be equipped as follows: conference table and 20 chairs; small seating arrangement for 10 people for informal conversations and conferences; three monitors for Dial Access System; sound recording equipment; secretarial facilities; other conference equipment.

V. RESEARCH AND DEVELOPMENT

The work of the Campus Media Learning Center should be continually evaluated and reviewed in terms of its stated objectives. This should be done in cooperation with the Office of Testing and Research. The evaluation of the learning and development of prospective teachers in meeting educational objectives, improving instructional techniques, and growth in self-reliance and self-direction are measurable variables concerning the structure and functioning of the Center.

Research and development would not be a formal part of the Center's program, but would be structured to allow an individual or groups of staff members and/or supervised teacher trainees to work on defined educational problems. The facilities of the Campus Media Learning Center: production, teaching-learning systems equipment, and data analysis techniques, would be available to those staff members and supervised students who would wish to conduct educational research.

VI. ADMINISTRATIVE STAFF

The Administrative Staff of the Campus Media Learning Center would be composed of a Director, a Coordinator of Activities, and the Supervisors of the eight Divisions within the Center.

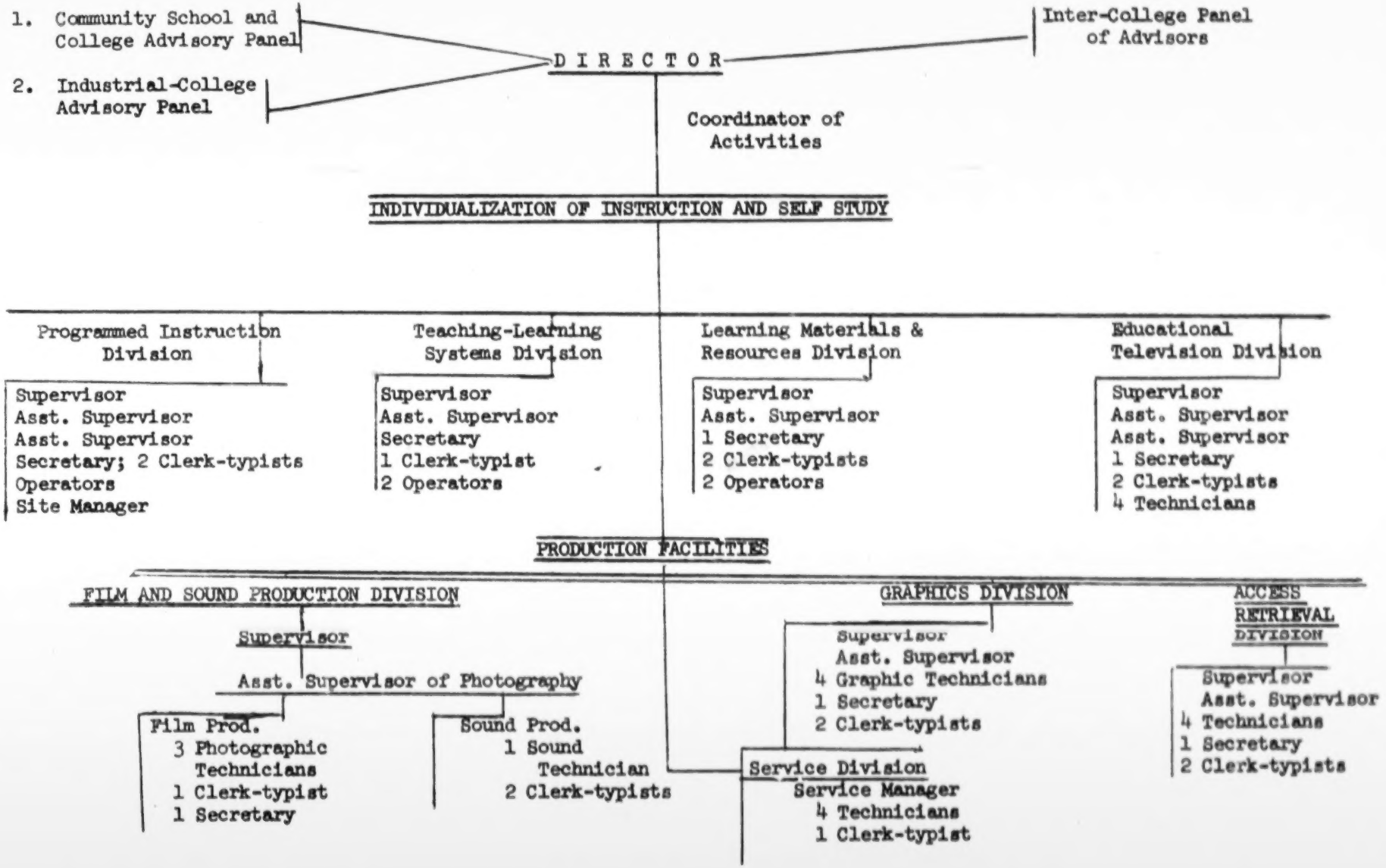
1. Director. The Campus Media Learning Center Director would be responsible for implementing the role assigned to the Center and the Center's activities both on and off campus. In addition he would unite the different Divisions of the Center into a cohesive group working toward the accomplishment of the Center's goals. The Director would be the chairman of the three Advisory Panels established for the Campus Media Learning Center. He would be responsible to the Dean of Teacher Education.

2. Coordinator of Activities. The Coordinator would be responsible for integrating the activities of the Campus Media Learning Center and those of the School-Community Teaching-Learning Centers.

3. Division Supervisors. Each Division Supervisor would be responsible for planning and executing the activities within his Division. In addition, Supervisors would teach units in Instructional Technology and act as advisors to staff members and prospective teachers in areas related to their (the Supervisors) particular specialization.

4. Division Assistant Supervisors. Each Division Assistant Supervisor would be responsible to his Supervisor for the efficient functioning of his particular Division, or for other assigned tasks (for example, liaison with another College department).

CAMPUS MEDIA LEARNING CENTER
Divisions and Administrative-Teaching Staff



CAMPUS MEDIA LEARNING CENTER - LARGE GROUP ROOMS

APPENDIX A

ELECTIVE COURSE FOR STUDENTS IN
EARLY CHILDHOOD EDUCATION SEQUENCE
(Nursery through Grade 2)

Instructional Technology (Education 1.0X)

A. The Study of the development of technology as a means of concept attainment, the bases for multi-stimulus presented materials, the investigation of individual prescribed instruction and lesson programs, technology in small group procedures, utilization and evaluation of various types of materials as applied to Nursery through grade 2 teaching experiences.

B. Three class hours, 2 laboratory hours: 4 credits

1 hour Campus Media Learning Center; 1 hour School-Community Teaching-Learning Center.

1. Campus Media Learning Center:
Investigation and evaluation of technological programs designed for early childhood education. The determination of materials to meet the needs of teaching individuals and small groups. The preparation of specific materials to meet the needs of children in the Campus Media Learning Center.

2. School-Community Teaching-Learning Center:
Technology Laboratory
Guided observation and participation in helping children gain skils in Language Arts, in exploring vicarious experiences, and developing concepts through the application of educational technology practices and procedures in the Laboratory and in classroom teaching situations.

C. Prerequisites:

Education 40.X

D. Exclusion Clause:

Students who attended Education 1.2X.

Appendix A - (continued)

ELECTIVE COURSE FOR STUDENTS IN ELEMENTARY SEQUENCE
AND FOR STUDENTS IN MIDDLE SCHOOLS SEQUENCE

Instructional Technology (Education 1.2X)

A. The study of educational technology processes in teaching Language Arts Skills and subject area concepts to children in a classroom situation, in small groups, and as a means of individualizing instruction. The investigation of the development of technology as a means of developing vicarious experiences, as a means of concept attainment, and as a means of improving instruction. The evaluation of different types of programs as applied to teaching in grades one through six.

B. Three class hours, 2 laboratory hours: 4 credits
1 hour Campus Media Learning Center; 1 hour School-Community Teaching-Learning Center.

1. Campus Media Learning Center:
Investigation and evaluation of technological programs designed for children of grades one through six. The determination of materials to meet the needs of teaching individuals and small groups. The preparation of specific materials to meet the needs of children in the Campus Media Learning Center.

2. School-Community Teaching-Learning Center:
Guided observation and participation in helping children gain skills in Language Arts, in exploring vicarious experiences, and developing concepts through the application of educational technology practices and procedures in the Laboratory and in classroom teaching situations.

C. Prerequisites:

Education 50.X or 55.X.

D. Exclusion Clause:

Students who have attended Education 1.0X or Education 1.3X.

Appendix A - (continued)

ELECTIVE COURSE FOR STUDENTS
IN SECONDARY SCHOOL SEQUENCE
(Grades 9 through 12)

Instructional Technology (Education 1.3X)

A. The study of the processes of educational technology in developing subject area concepts, the evaluation of technologically presented programs, the study and application of individually prescribed instruction, computer assisted instruction, and educational television. The preparation and testing of lessons directed towards concept attainment of individual children, small and large group presentations, and the use of technology as a remedial approach to teaching youth.

B. Three class hours, 2 laboratory hours: 4 credits
1 hour Campus Media Learning Center; 1 hour School-Community Teaching-Learning Center.

1. Campus Media Learning Center:
Investigation and evaluation of technological programs designed for secondary high school students. The determination of materials to meet the needs of teaching individuals and small groups. The preparation of specific materials to meet the needs of children in secondary education.

2. School-Community Teaching-Learning Center:
Guided observation and participation in helping youth. gain skills in subject matter areas and in obtaining conceptual development of specific subject areas through the application of Instructional Technology processes and strategies.

C. Prerequisites:

Education 55.X or 60.X.

D. Exclusion Clause:

Students who have attended Education 1.0X or Education 1.2X.

APPENDIX C

DESIGN FOR COUNSELING SERVICES AND AFFECTIVE EDUCATION

Design for Counseling Services and Affective Education

This paper accepts as its base the rationale, assumptions and goals in the document on Curriculum which it accompanies and supports the premise that a Brooklyn College Counseling Center on Campus and Counseling facilities located in the School-Community-Teaching-Learning Centers will be necessary in order to impliment the Counseling, Academic Counseling, Orientation and Screening functions. These facilities should include a reference and referral library, several conference rooms, a one-way vision room, a confidential file area, private rooms for individual interviews and adequate secretarial facilities.

Two major groups should be established: one consisting of the entire personnel involved in Counseling, Academic Counseling, Orientation and Screening; the second, consisting of faculty involved in the area of Affective Education. The functions of these groups should include assistance to the prospective teacher in continuous planning, advisement, development of self-awareness and development awareness of group processes.

The following is a schematic representation of the various Functions including Scope, Technique, Staff, Time Allocation and Facilities.

FUNCTION	DEFINITION	SCOPE	TECHNIQUE	STAFF (per 100 student
Counseling	"Individual counseling is communication between counselor and counselee relative to the situation of the latter. Such communication has as its primary purposes the enabling of the counselee to cope better with his immediate and specific difficulties and to develop his capacity for self-direction and self-understanding in order to meet more effectively the problems of future living."[1]	Freshmen through senior year	1) Individual sessions with referrals for prolonged or extensive treatment 2) Counselors should refer to clinical staff members when case requires more than "on the job" counseling	1) Trained clinical psyc 2) Trained counselors
Academic Counseling	That division of counseling which specifically deals with curriculum guidance and planning	Freshmen through senior year	1) Individual sessions, group sessions 2) Routinise aspects of programming	1) Education department m trained in counseling edgeable in college cu teaching requirements tification, Board of E local school boards, e sitive to student needs referral. 2) Graduate counseling stu

[1] Sawrey, James M. & Telford, Charles W., Educational Psychology. Boston: Allyn & Bacon, Inc. 1968, p. 525.

TECHNIQUE	STAFF (per 100 students)	TIME ALLOCATION (per 100 students)	FACILITIES
vidual sessions with rrals for prolonged xtensive treatment selors should refer linical staff members case requires more "on the job" counsel-	1) Trained clinical psychologists 2) Trained counselors	1) Full day, 5 days per week, 2 psychologists on duty equals 2 clinical lines 2) Full day, 5 days per week, 2 counselors on duty equals 2 counselors' lines	1) Brooklyn College Counseling Center 2) School-Community-Teaching-Learning Center 3) One and two above should have confidential files as well as completely private interview rooms
idual sessions, sessions nise aspects of pro- ing	1) Education department member trained in counseling and knowledgeable in college curriculum, teaching requirements "State certification, Board of Education, local school boards, etc." Sensitive to student needs requiring referral. 2) Graduate counseling students	1) 2 full-time staff lines for counseling and direct supervision of student counselors	Brooklyn College Counseling Center and School-Community Teaching-Learning Centers

FUNCTION	DEFINITION	SCOPE	TECHNIQUE	STA
Orientation	Orientation is a process designed to acquaint (exp. oneself) with the existing situation. Functionally this definition will be divided into:			
	1)Secondary school Orientation to Brooklyn College Education Program	1) Junior and senior students in secondary schools of New York City	1) Visits and talks with students in groups and individually if they express interest	1) Ed wi
	2) Community Orientation to Brooklyn College Education Program	2) Parents and community for the dissemination of information with the goal of selective recruitment	2) Meetings, visits and individual talks with community leaders, groups, organizations, etc.	2) Ed wi mu cu
	3) Community Colleges Orientation to Brooklyn College Education Program	3) Perspective Brooklyn College Education students currently in the Community Colleges in order to inform them concerning Brooklyn's Education offerings and aid them in their career planning	3) Meetings and voluntary individual sessions	3) Ed kn le co
	4) Freshmen Level Orientation	4) Invitation to all new Brooklyn College students interested in teaching in order to acquaint them with Brooklyn College's Education offerings and thereby reach desirable perspective teaching candidates, early.	4) Individual sessions, meetings, brochures, school publications and mailings	4) Ed kn le qu
	5)Sophomore Level Orientation	5) a. Early childhood and elementary school perspective teachers b. Middle and secondary school perspective teachers	5) Meetings, publications, individual sessions	5) a. b.

TECHNIQUE	STAFF (per 100 students)	TIME ALLOCATION (per 100 students)	FACILITIES
1) Visits and talks with students in groups and individually if they express interest	1) Education Department staff member with expertise re: the Curriculum	1) 6 release hours - Education Department Instructor	1) Wherever schools are
2) Meetings, visits and individual talks with community leaders, groups, organizations, etc.	2) Education Department staff member with expertise regarding the community and knowledge re: college curriculum	2) 3 release hours - Education Department Instructor	2) Wherever interested people are - community centers, clubs, schools, especially School-Community Teaching-Learning Centers
3) Meetings and voluntary individual sessions	3) Education Department staff member knowledgeable re: Brooklyn College curriculum and community colleges	3) 3 release hours - Education Department Instructor	3) Meetings in the Brooklyn College Counseling Center on an individual, voluntary appointment basis for interested perspective students and group meetings in the community colleges and visits to School-Community-Teaching-Learning Centers
4) Individual sessions, meetings, brochures, school publications and mailings	4) Education Department staff member knowledgeable re: Brooklyn College curriculum and teaching requirements	4) 6 release hours - Education Department Instructor	4) Brooklyn College lecture hall and housing for individual inquiries at Brooklyn College Counseling Center. Visits to School-Community-Teaching-Learning Centers
5) Meetings, publications, individual sessions	5) a. Education Department staff member knowledgeable re: Brooklyn College curriculum and services b. Board of Education licensing division representative	5) 6 release hours - Education Department Instructor	5) Brooklyn College lecture hall and housing for individual inquiries at Brooklyn College Counseling Center and School-Community Teaching-Learning Centers

FUNCTION	DEFINITION	SCOPE	TECHNIQUE	STAFF (per 100 students)
Orientation (continued)		c. Both "a" and "b" should have group and individual sessions in order more fully to discuss programming, licensing and community requirements and the multiplicity of teacher-related professions		c. Local school board memb
	6) Junior Level Orientation	6) Pre-student-teaching population	6) Group sessions, data forms and individual sessions	6) a. Education Department s member knowledgeable r Student Teaching cours b. Apprentice teachers to assist education staff member
	7) Senior Level Orientation	7) Graduate programs and job information	7) Group and individual sessions, guests from graduate schools and job recruiters	7) Brooklyn College graduate gram instructor

TECHNIQUE	STAFF (per 100 students)	TIME ALLOCATION (per 100 students)	FACILITIES
	c. Local school board member		
roup sessions, data orms and individual essions	6) a. Education Department staff member knowledgeable re: Student Teaching courses b. Apprentice teachers to assist education staff member	6) 4 release hours - Education Department Instructor for conducting meetings and supervising student and/or apprentice teacher programs	6) Brooklyn College lecture hall and housing for individual inquiries at Brooklyn College Counseling Center
roup and individual essions, guests from raduate schools and ob recruiters	7) Brooklyn College graduate program instructor	7) 4 release hours - Graduate Education Department Instructor	7) Brooklyn College lecture hall and housing for individual inquiries at Brooklyn College Counseling Center

FUNCTION	DEFINITION	SCOPE	TECHNIQUE	STAFF (per 100 students)
Screening	The processes by which students are judged suitable to enter into a teaching career	Freshman year through senior year. Criteria for teaching have long eluded the experts. Certain criteria are generally assumed to be acceptable:		
		1) A knowledgeable human being	1) Judged by college entrance battery plus proficiency examinations where necessary. Remedial work to be required in areas of obvious deficiency. (Courses should be offered in these areas by the Department of Educational Services.)	1) College Testing Office
		2) Knowledge in the subject matter taught	2) Major department evaluation	2) Cooperating college depa
		3) Relatively good health	3) College Health Services	3) Departments of Health & Education (M & W)
		4) Ability to communicate	4) Observation of performance with children	4) All Education Instructor
		5) Apparent psychological stability	5) Staff and responsibilities with respect to screening and entrance to courses should be worked up as course sequences are being developed.	5) Education Department Ins and trained psychologists

TECHNIQUE	STAFF (per 100 students)	TIME ALLOCATION (per 100 students)	FACILITIES
		One full time Education Department Instructor to organize and coordinate the various screening avenues.	Brooklyn College lecture halls and housing for individual inquiries at Brooklyn College Counseling Center. Data to be stored in Campus Media Learning Center. Decisions would be made with regard to data for retrieval system and disposable data.
1) Judged by college entrance battery plus proficiency examinations where necessary. Remedial work to be required in areas of obvious deficiency. (Courses should be offered in these areas by the Department of Educational Services.)	1) College Testing Office		
2) Major department evaluation	2) Cooperating college departments		
3) College Health Services	3) Departments of Health & Physical Education (M & W)		
4) Observation of performance with children	4) All Education Instructors		
5) Staff and responsibilities with respect to screening and entrance to courses should be worked up as course sequences are being developed.	5) Education Department Instructors and trained psychologists		

FUNCTION	DEFINITION	SCOPE	TECHNIQUE	STAFF (per 100 students)
Affective Education	"... the learner is not merely a cognitive entity; on the contrary, he exhibits affective or emotional states in his motivations, attitudes, personality, anxieties, contentions and beliefs-all of which influence his learning in direct and indirect ways."[2]			
	1) Examination of self	1) Sophomore level Incorporated into the first course, "Children and Youth in Schools in Urban Environment" and Early Childhood course.	1) The course as outlined involves a team of faculty. It will be the function of the trained psychologist to make the student more aware of himself and his reaction to others in group situations.	1) Psychologist to funct team teacher
	2) Development of self and group awareness. (Refer to Special Features of the Program in Section I of the "Curriculum Document")	2) Junior level Incorporated into "Learning courses	2) a. To continue work of previous year in developing greater personal insights b. To develop greater awareness of inter group dynamics in college and schools	2) Psychologist as a te with specific group skills
	3) Sensitization to self, group, instructors and concepts. (Refer to Special Features of the Program in Section I of the "Curriculum Document")	3) Senior level Incorporated into Comprehensive Teaching Courses	3) a. To continue work of previous 2 years b. To further develop insights and skills required of a teacher in his new role	3) Psychologist as a te plus his availabilit (in the Centers) fo consultation

[2] Ausubel, David P. & Robinson, Floyd G., School Learning. New York: Holt, Rhinehardt and Winston, Inc. 1969. p. 345.

TECHNIQUE	STAFF (per 100 students)	TIME ALLOCATION (per 100 students)	FACILITIES
) The course as outlined involves a team of faculty. It will be the function of the trained psychologist to make the student more aware of himself and his reaction to others in group situations.	1) Psychologist to function as a team teacher	1) To be worked out by instructional teams of course sequences	1) Brooklyn College classroom
) a. To continue work of previous year in developing greater personal insights b. To develop greater awareness of inter group dynamics in college and schools	2) Psychologist as a team teacher with specific group dynamics skills	2) To be worked out by instructional teams of course sequences	2) a. Brooklyn College classrooms b. School-Community-Teaching-Learning Centers
) a. To continue work of previous 2 years b. To further develop insights and skills required of a teacher in his new role	3) Psychologist as a team teacher plus his availability to students (in the Centers) for individual consultation	3) To be worked out by instructional teams of course sequences	3) a. Brooklyn College classrooms b. School-Community-Teaching-Learning Centers

FUNCTION	DEFINITION	SCOPE	TECHNIQUE	STAFF (per 100 students)
Affective Education (continued)	4) Sensitivity training - "The term is used loosely to include a wide range of laboratory training approaches in human relations, group dynamics, organizational development, as well as a number of verbal and non-verbal experiences that seek to increase awareness and release human potential."[3]	4) Open to seniors and graduate students	4) A voluntary course in sensitivity training	4) Psychologist with sensitivi skills and training

[3] Birnbaum, Max, "Sense About Sensitivity Training", Saturday Review of Literature. Nov. 15, 1969, pp. 82-3, 96-98.

TECHNIQUE	STAFF (per 100 students)	TIME ALLOCATION (per 100 students)	FACILITIES
4) A voluntary course in sensitivity training	4) Psychologist with sensitivity skills and training	4) To be worked out by instructional teams of course sequences	4) Brooklyn College classroom

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APPENDIX D

THE ORGANIZATION OF INSTRUCTIONAL TEAMS

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I. Introduction

Is it possible to personalize - to humanize - the educational process for students preparing to become teachers?

Can we set an example of the method of teaching that we hope our students will employ when they become teachers? In effect, can we practice what we preach?

Can we provide a guided, reasoned continuity of educational experience in which the student can exercise self-direction in cooperation with instructors with whom he is closely involved?

Is it possible to break down artificial barriers between individual courses and disciplines and encourage inquiry, problem solving, scepticism, and intellectual curiosity - relating directly to the vital issues which involve today's students?

The Ad Hoc Committee on Organization of Instructional Teams believes the answers to these questions to be "yes". Within a large, often depersonalized educational setting, involving many hundreds of instructors and thousands of students, the solution would seem to be to think in terms of smaller units within the larger entity.

This report proposes a team approach to instruction - specifically, the Instructional Team Plan. Recognizing that all faculty and students may not wish to participate in the type of team plan here described, the Committee has provided for alternative approaches to instruction.

The Instructional Team Plan is divided into two parts, Plan I and Plan II. Plan I is designed for the latter two or three years of the undergraduate students' educational program and may be implemented by the Department of Education as it is presently organized. Plan II is designed for the first two years of undergraduate education and is, therefore, a college-wide plan, which would require consideration and action beyond the Department of Education.

Succeeding pages explain (1) the general structure and content of the Instructional Team Plan, (2) more specific application of the proposal to Plan I, (3) suggested college-wide consideration of Plan II, and (4) prototype Instructional Teams as detailed examples of the plan as it can be implemented.

The advantages of the Instructional Team Plan to students, faculty, and, it is hoped, to the schools these students will eventually serve, should become apparent as this report evolves. The close interaction between the Instructional Team and the community is shown, beginning early in the Educational Program and growing into the intense involvement of the teaching intern in the School-Community Teaching-Learning Center.

This committee recognizes the difficulties of implementing such a dramatic change in the structure of the Department of Education. Thus a gradual, progressive implementation is proposed, based upon the readiness of faculty and students to participate.

II. The Instructional Team Plan

A. Basic to the Instructional Team Plan is the principle of a small number of faculty members and students organized together to carry out the educational program - responsible for and accountable to each other.

B. The typical Instructional Team would be composed of five or six instructors, assigned full time, and fifty to sixty students. They would remain together for a two or three year period.

III. Staffing the Instructional Team

A. Faculty members who seek closer personal involvement with their students, who desire to make use of methods of instruction beyond conventional course structures, and who wish to interact with other instructors on an inter-disciplinary basis will be recruited for the Instructional Teams.

B. Selection of faculty must take into consideration the personalities and motivations of the instructors; thus faculty should, to the degree possible, select the teams in which they would work.

C. Staff members from other departments should be "borrowed" and assigned as full-time team members, particularly for the secondary level teams in which a specific discipline is emphasized. This practice will become more necessary as the number of teams increases, thus taxing the personnel resources of the Department of Education.

D. Final responsibility for assignment of faculty and students to Instructional Teams lies, of course, with the Dean of Teacher Education. However, experience has taught us that the team approach will not succeed unless the participants on the teams are actively involved in organizing and implementing the program from the outset.

The general guidelines of this plan should first be explained to the entire Department of Education. Volunteers to participate would be solicited. From among the volunteers, viable working teams would be built, combining the judgement of the Dean, his staff, and the prospective team members. One would expect that within the Department "embryonic" teams would form themselves and come forward, seeking official sanction.

IV. Leadership of the Instructional Teams

One faculty member on each Instructional Team would be named Coordinator by his team colleagues. This assignment could be rotated among team members.

V. Faculty-Student Relationships

A. Each Instructional Team would have a teacher-pupil ratio of 1 to 10-12.

B. Each faculty member would act as adviser to 10-12 students for a two year period and would be accountable for guiding his students' instructional program.

C. The heightened involvement of faculty and students in each other's lives, in a personalized team setting, is considered one of the greatest strengths of this plan.

D. Personality conflicts between students and teachers could be better and more constructively handled. Efforts at adjustment to the needs of the other would be made before resorting to avoidance or transfer to another team, which latter case is always possible, when necessary, for a student's (or instructor's) well-being.

E. Instructors in different Instructional Teams could exchange students temporarily during times of specialized inquiry to take advantage of the other's particular competencies.

VI. Student-Student Relationships

A. Students would have a feeling of identity with their team peers. There would be a greater sense of working toward common goals.

B. Current research indicates that some of the best learning takes place when students teach other students. Thus students of two or three levels in each team (such as juniors and seniors) will add to the learning potential of student-to-student interaction.

VII. Organization for Instruction

A. Each house faculty team would:

1. Organize its own instructional schedule

2. Hold planning meetings at least weekly

3. Provide instruction which meets requirements of the college, and which will be appropriate for teacher certification.

B. Organizational patterns, schedules, and instructional styles could vary widely among Instructional Teams - for example -

1. A team may maintain traditional class hours and course requirements, or -

2. A team may operate on a highly individualized, inquiry-

based level, where faculty and students interact one-to-one, in small groups, in large group instruction, in interdisciplinary projects - all of which provide at least the equivalent of course requirements needed for transcripts.

VIII. The Instructional Teams and the Public Schools

A. Instructional Teams would make use of community resources in their basic programs, and would accordingly visit and observe in the City schools.

B. Instructional Teams would maintain some physical connection with the college - particularly with second and third year students, but the bulk of their activities would take place in the School-Community Teaching-Learning Centers.

IX. Plan I: Instructional Teams - Department of Education

Within the Department of Education, Instructional Teams would be formed according to the organizational patterns developed for Teacher Education as presented in the body of this curriculum document:

A. N-2 Team: Sophomores, Juniors and Seniors, approximately 18 each.

B. Elementary Grades team: Sophomores, Juniors and Seniors, approximately 18 each.

C. Middle School Team: Juniors and Seniors, approximately 25 each.

D. High School Team: Juniors and Seniors, approximately 25 each.

E. Middle School and High School Teams would be further specialized by subject areas, such as

1. High School Mathematics Instructional Team

2. Middle School Communications Arts Instructional Team

Plan I Staffing. The Instructional Team would be staffed by three or four faculty members of the area of specialty - i.e., Early Childhood Education, Secondary Science Education - plus one from the Behavioral Sciences and one from Educational Foundations. They would provide basic instruction, supervise student teaching, conduct seminars and engage in field experiences, largely in the School-Community Teaching-Learning Centers.

Cooperating teachers in the public schools would be partners on the team and would share responsibility for the training of the students in the Instructional Teams.

Assignment of Students. Students for each Instructional Team would be selected by the faculty of the team from volunteers solicited by the Department. Ideally, students would join the teams at the outset of the curriculum sequence, but provision would be made for latter entry, following consultation with team faculty to establish educational expectations.

Transfer students from other colleges, such as community colleges, who enroll at the third year level could be integrated into the Instructional Teams.

Curriculum of Instructional Teams. Curriculum offerings of the various Instructional Teams are described in the body of this curriculum document.

Prototype Instructional Teams. Attached to this report as appendices are detailed examples of individual Instructional Teams. They are intended, not as definitive, but as possible implementations of the Instruction Team Plan.

Appendix A: Instructional Team - Communication Arts Outline

Appendix B: Instructional Team - High School Mathematics Education: Team Organization

Appendix C: Instructional Team: A Tentative School of General Studies Variation

Instructional Team Plan at the School-Community Teaching-Learning Centers. Vital to the success of the Instructional Team Plan is its successful integration with the instructional plan at the School-Community Teaching-Learning Centers located in or near the public schools. The example cited of Mathematics Education in Appendix B indicates one means to bring about such interaction.

This report has also previously recommended that public school personnel be included as full partners in teams in the field. Recognition of such public school personnel as adjunct college faculty with some financial advantage is also a worthy possibility.

X. Implementing the Instructional Team Plan in the Department of Education

A. Because of the difficulty of establishing many teams for literally thousands of students, it is suggested that two pilot teams be formed for the February, 1971 semester. Refinements in the plan can be made from the experience gained.

B. Beginning in September, 1971, subsequent Instructional Teams would be formed as they are ready with well-matched faculty teams for each. It would be a great mistake to force this (or any) plan on reluctant, ill-prepared faculty and students.

C. Experience will teach us whether the entire Department of Education could - or should - be included in the Instructional Team Plan. It could well be that a series of conventionally scheduled classes will continue to be necessary.

XI. Plan II: Instructional Teams - Brooklyn College

Plan II suggests an Instructional Team approach for the first two years of undergraduate education and is, therefore, beyond the province of the Department of Education. The value of the team approach as described previously in this report would also apply to the earlier Liberal Arts sequence. The following

are suggested applications of the plan to the college as a whole:

Assignment of Students to Instructional Teams

A. Initial placement of students in Plan II Teams would be heterogeneous. So far as possible, the student population of each team should be balanced ethnically and with respect to sex.

B. Freshmen and sophomores would be grouped heterogeneously in similarly organized Instructional Teams. Each team would include approximately 1/2 freshman and 1/2 sophomores, thus changing only 1/2 its population each year.

NB: Special open admissions teams could be established for students who would benefit from a program geared to their special needs.

C. Transfer of students between Plan II Teams could be made by the mutual consent of the student and coordinators of the teams concerned.

Staffing the Plan II Instructional Team

The Plan II Team could be staffed, for example, by one faculty member each from the English, Social Studies, Mathematics, and Science disciplines, plus one from Psychology/Sociology. They would provide the base for instruction for the 50-60 students in the Instructional Team. Some instructors would be assigned from the Department of Education; others, from other Departments. Courses in other disciplines - such as, Physical Education and Foreign Languages - would be scheduled as needed in the same manner as they are presently.

Curriculum of the Plan II Instructional Team

Curriculum offerings within a Plan II Team are described in part in the body of this document and are further stated in college policy. Appendix D to this report "A Prototype Plan II Instructional Team: Course Sequence," is an example of how such a team could organize its course work.

XII. Evaluation of the Proposed Organizational Structure

A plan for evaluation of the Instructional Team Plan should become part of the overall curriculum. In addition to helping to determine how well the structure is fulfilling its goals, evaluation can serve as a dynamic input to generate modification and change.

A. Those involved with modification would seek to answer the following questions:

1. Does the organizational structure function to increase continuity and integration of the learning experiences within the team?

2. Has the team provided sufficient supervision and counselling to maximize the unity and utility of all course work?

3. Does the team structure foster early professional identification at the point when students make their first commitment to education?

4. Does the team structure contribute to a climate of increased individual and group responsibility to the learning and teaching process? Is there any evidence that the motivations for teaching and learning are a result of the team structure?

5. To what extent does the team structure cultivate and use the the individual strengths of its student and faculty members?

6. Is the teaching-learning model of the team consonant with the way we hope our graduates will be prepared to teach?

B. This committee is aware of the complexity of evaluation. We are concerned that evaluation procedures be sound in technique and in criteria. We see the value of a permanent committee to monitor the success of our program by calling on groups of faculty and students as they see fit and charging them with aspects of this ongoing evaluation.

We call attention to the fact that none of the goals linked to this organizational structure are associated with conventional academic measures. We urge that such standards not be imposed on the evaluation procedure.

We feel that our goals can be translated into identifiable behaviors and that suitable measurement techniques must then be developed.

Appendix A

Prototype Plan I - Instructional Team: Communication Arts

A prototype of an instructional program for third and fourth year students specializing in secondary school Communication Arts will help one to visualize a typical educational continuum.

Electives outside the team curriculum are not shown. However, such elective courses are possible when the need or desire arises. One should also note the Summer Experience Program which is an integral part of this particular illustration.

BROOKLYN COLLEGE of CUNY
COMMUNICATION ARTS PROGRAM
Undergraduate Curriculum

PROTOTYPE
Sample Educational Program

1st semester	JUNIOR YEAR		2nd semester
Credits	Course	Credits	Course
3	Methods of Teaching + Observation	7	Teaching Seminar + Performance Supervised Student Teaching
3	Literary Movements	3	Literary Movements continued
3	Developmental and Remedial Reading (lab)	3	Aural-Oral-Visual Media (lab)
3	Adolescent Psychology		
3	English as Second Language		
15		13	

1st semester	SENIOR YEAR		2nd semester
Credits	Course	Credits	Course
3	Measurements and Statistics	3	Literary Criticism
7	Internship + Seminar	7	Internship + Seminar
2	Culminating Seminar	2	Culminating Seminar
12		12	

7 credits — SUMMER EXPERIENCE PROGRAM

- to be taken before sophomore, junior or senior year
- to include experiences in living and learning in cultures abroad or in deprived areas (e.g., ghetto, reservations, et al) Summer employment in such areas could meet the requirements.

---

59 credits Total (two years)

Appendix B

Instructional Team - High School Mathematics Education: Team Organization

1. The Student Population would consist of 50-60 students in their 5th, 6th, 7th, or 8th semesters. They would have completed the Calculus Sequence in Mathematics and 45 credits of required Liberal Arts courses. No more than 55%, and no less than 45% would be seniors.

2. Provision for Multiple Entry Points: A student entering for his 5th semester shall meet the requirements listed in #1 above. A student entering for his 6th semester shall meet the requirements in #1 plus 3 Mathematics courses from the required list and 10 credits in required Liberal Arts courses (or Liberal Arts requirement completed). A student entering for his 7th semester shall meet the requirements in #1 plus 6 Mathematics courses from the required list and all Liberal Arts requirements completed. No student will be admitted for one semester only. A student entering for his 8th semester would have to commit himself to a 9th semester in order to complete the Sequence and would have to meet requirements for admission to the 7th semester.

3. The Faculty Population: This consists of one-two from the Mathematics Department, one-two from Mathematics Education, and two from Behavioral Sciences and Educational Foundations, in addition to the Department Chairmen from the public schools occupied by the house.

4. The Student Programs: Each semester a student will select 5 units from: 1) required mathematics, 2) required mathematics, 3) elective mathematics, 4) methods, 5) foundations, 6) student teaching, 7) paraprofessional activities, 8) free elective from outside the team. A required seminar will provide a 6th unit.

5. Certification Requirements: Mathematics: 8 required courses beyond Calculus, Foundations: 2 courses (Proseminar), Mathematics Education: 2 units of paraprofessional activities in connection with proseminar, 2 units of Methods, 2 units of Student Teaching in connection with Methods, 1 unit of seminar for every semester with the team.

6. The Physical Arrangements: There will be 25 juniors and 25 seniors assigned to a paired junior high-senior high or middle school-high school. Thirteen seniors will teach in the lower school and thirteen in the upper school. Thirteen juniors will serve as paraprofessionals in the lower school, and thirteen in the upper school. Each semester the school assignments will be switched. Thus a student will serve as paraprofessional in both upper and lower school and will student teach in both upper and lower school.

7. Units Offered in One Semester:

1) Required Mathematics	two sections	25 in each
2) Required Mathematics	two sections	25 in each
3) Mathematics Elective	one section	
4) Methods	two sections	13 in each
5) Foundations	two sections	13 in each
6) Paraprofessional Activities		25 students
7) Student Teaching Activities		25 students
8) Seminar	4 to 6 sections	8 to 12 students

8. Faculty Responsibilities: (Naturally these divisions of responsibility will have to be worked out among the participating faculty)

Unit	Faculty Responsibilities		
	Primary Staff In:	Secondary Staff In:	Tertiary Staff In:
1) Required Mathematics	Mathematics	Math. Educ.	Dept. Chrmn.
2) Required Mathematics	Mathematics	Math. Educ.	Dept. Chrmn.
3) Mathematics Elective	Mathematics	Math. Educ.	Dept. Chrmn.
4) Methods	Math. Educ.	Foundations	Dept. Chrmn.
5) Foundations	Foundations	Dept. Chrmn.	Math. Educ.
6) Paraprofessional Activities	Foundations	Dept. Chrmn.	Math. Educ.
7) Student Teaching Activities	Math. Educ.	Dept. Chrmn.	Foundations
8) Seminar*	*Each faculty member leads a Seminar and is the key contact for the students in his Seminar. Each Seminar must contain both juniors and seniors to get a mixing of experiences. Possibly each faculty member could serve as a secondary member of another Seminar. The Department Chairman might also be used in this role.		
9) Outside Courses			

9. Student's Schedule Time: All activities are scheduled in the schools. For his 6 units a student would need the following hours per week:

a. Mathematics	6 hours
b. Foundations or Methods	4 hours
c. Paraprofessional Activities or Student Teaching Activities	15 hours
d. Seminar	2 hours
e. Elective	3 hours
Total	30 hours

10. An Example of a Weekly Schedule:

Time	Day 1	Day 2	Day 3	Day 4
9:00	Methods a Foundations a	Seminar	Methods a Foundations a	Seminar
10:00	Methods a Foundations a	Seminar	Methods a Foundations a	Seminar
11:00	Math. Required a	Math. Required a	Math. Required a	
12:00	Math. Required b Math. Elective	Math. Required b Math. Elective	Math. Required b Math. Elective	Team Faculty Planning
1:00	Math. Required b	Math. Required b	Math. Required b	Team Faculty Planning
2:00	Math. Required a	Math. Required a	Math. Required a	
3:00	Methods b Foundations b	Seminar	Methods b Foundations b	Seminar
4:00	Methods b Foundations b	Seminar	Methods b Foundations b	Seminar

This schedule makes possible the formation of a team within a team. Students could schedule Mathematics or Foundations, Mathematics and Seminar in the morning and engage in paraprofessional activities or student teaching activities in the afternoon, or vice-versa. Then morning methods and foundations faculty could work with their own students in the afternoon in paraprofessional activities and student teaching activities, etc. Under this arrangement, it would even be possible for a teacher to be assigned two student teachers and/or two paraprofessionals without conflict in hours.

A Four Year Program Leading to Certification as a Secondary School Mathematics Teacher

SEMESTER

A. Math 3.2 (3 credits) and 13 credits of required Liberal Arts courses

B. Math 4.2 (3 credits) and 13 credits of required Liberal Arts courses

C. Math 5.2 (3 credits) and 13 credits of required Liberal Arts courses

D. Math 11.1 (3 credits), Math 14.1 (3 credits) and 10 credits of required Liberal Arts courses

- -

E. Math 11.2 (3 credits), Math 14.2 (3 credits), Educ. 71.X (3 credits) and 4 credits of required Liberal Arts courses

F. Math 51.1 (3 credits), Math 9 (3 credits), Educ. 72.X (3 credits) and 7 credits of required Liberal Arts courses

G. Math 8 (3 credits), Educ. 73.X (6 credits, including student teaching) and 8 credits of required Liberal Arts courses or free electives.

H. Math 25 (4 credits), Educ. 74.X (6 credits, including apprentice teaching) and 7 credits of free electives

TOTALS:	Education	18 credits
	Mathematics	34 credits
	Liberal Arts	50-70 credits

Appendix C

A Tentative Variation For The School of General Studies

1. An experimental program for Seniors and graduate non-matriculated students only, to last one full year (three terms), beginning with the Summer term. Only part-time jobs, teaching or otherwise, will be possible the third (Spring) term. Up to 60 students accepted. All formal course-work will be taken in the evenings.

2. Term I (Summer) to have the same experiences and content and faculty etc. personnel for all enrollees, regardless of teaching-level:

   a. Intensive individual and/or small-group study of three different types of neighborhoods (each student to study only two, his/her own and one other type): inner-city slum, working-class plus lower-middle-class urban area, suburban middle-class. (Subsequent comparison-groups to include students who have studied all three types on a collective basis).

   b. Two 2-hour total-personnel seminars per week, plus two work-group discussion periods scheduled per week, plus assignment on an individual basis to a particular cooperating faculty-person for program counseling plus c. following, to be the uniformly required college-centered set-up. Neighborhood-studies to be done at student's own convenience.

   c. Initiation of a clinically oriented "professional development" self-exploration group utilizing role-playing, sensitivity-group (S-G) and etc. techniques; to be conducted by a qualified clinical faculty-person. (All students? Sub-grouped, with each group having a mixture of teaching levels? Plus faculty?) Pass-fail grading; only regular attendance required to get a Pass.

   d. Course-credit Breakdown:

Course-Area	Credits Student	Credits Faculty
Growing Up in Society I: The Social & Subcultural Setting (for individual socialization)	3	3
Methods of Community/Subcultural Study	2	2
Sociological & Philosophical Foundations of Educ. (Comparative)	3	3
Professional Development	1	3
Program Counseling	0	1
	9	12

   e. To be staffed by a cultural anthropologist on loan, a social-psychologically oriented developmental psychologist, a sociological and philosophical educationist, S-G etc. clinician, three "adjunct" community people.

3. Term II (Fall) to entail part-time sub-division into three(?) separate groups:

A- level:	pre-school and primary	} See Supplementary Term II
B-level:	middle grades	} Statement for curriculum
C-level:	junior and senior high school	} breakdown.

Class work to consist of a combination of total-group plus school-level sub-group meetings. Other courses in other departments according to individual lacunai and/or interests.

a. Plus continuing assignment for counseling-plus to the same faculty-person, plus a school-level-delimited S-G continuing experience. Field work to be done at student's own convenience.

b. Course-credit breakdown:

Course-Area	Credits Students	Credits Faculty
Growing Up in Society II: The Individual Socialization Process (Lectures plus school-level-groups seminar)	3	3
Including an Observation Exercise	1	1
Evaluation of Current Institutions as Socializing Agents: Theory and Methods (includes a field experience entailing study of actual roles of family, school, other institutions such as TV)	2	3
Professional Development, continued	1	3
Program Counseling, continued	0	1
	7	11

c. To be staffed by same developmental psychologist and educational philosopher and adjunct-community people and S-G clinician as for Term I, plus rotating subject-area and methods people.

4. Term III (Spring) to entail complete separation into the respective school-levels and to be strongly field (school plus community plus home) centered. Only part-time jobs will be possible for participating students this term.

a. Course-credit breakdown:

Course-Area	Credits Students	Credits Faculty
Principles of School Learning & Instructional Practice (and evaluation)	3	3
Principles and Practices of Curriculum Development & Evalua.	3	3
Professional Development, continued	1	3
Program Counseling, continued	0	1
Methods of (Subject-Area)Teaching,plus supervised practice (own job?) teaching	?	?
	—	—

b. To be staffed by a learning-theory cum curriculum person, plus same S-G clinician, plus rotating methods and subject-area people for A and B levels, one methods and subject-area specialist(s) for C-level people.

Supplementary Term II Statement

A-Level Group

1. The central experience is an intensive study and subsequent comparison of the home to school to home lives of children from conception to 8 years in the same areas as student studied during Term I.

2. Evaluation of socializing agents available to children of this age-span in each type of area, according to instructor(s)-student(s) developed criteria.

3. Regular observation and teacher-aiding in child-care or nursery-school or kindergarten facilities in one of the first two neighborhood types studied by the student during Term I.

B-Level Group

1. The central experience is an intensive study and subsequent comparison of the home to school to home lives of children and youth from 8 to 13 in the same areas as student studied during Term I.

2. Same as A-Level 2.

3. If already teaching, use of own experience as partial fulfillment of school-observation requirement (since probably teaching in a parochial school). For those not teaching, assignment to a school in the same urban area as student studied during Term I for tutoring and observation; supplementary observation for those teaching.

C-Level Group

1. Same as B-Level 1. for youth from 12 to 19.

2. Same as B-Level 2. and 3.

Appendix D

Prototype Plan II-Instructional Team: Course Sequence

The following prototype provides an example of the educational program which could be followed by a student who expects to specialize in the Communication Arts. To envision a program for a student aiming toward another area of specialization, one should substitute appropriate courses for those marked with asterisks (electives).

BROOKLYN COLLEGE OF CUNY
COMMUNICATION ARTS PROGRAM
Undergraduate Curriculum

1st semester credits	FRESHMAN YEAR course	2nd semester credits	course
1	Seminar - Introduction to Team	1	Seminar continued
3	Psychology + lab	3	Psychology + lab
3	Sociology + lab	3	Anthropology + lab
*1	Physical Education	*1	Physical Education
2	Usage and Basic Writing	*3	Voice-Diction/Oral Interp.
3	Foreign Language + lab	3	Foreign Language + lab
*3	Survey of Philosophical and Literary Movements & Backgrounds	*3	Survey continued
*2	Reasoning and Debate		
18		17	

1st semester credits	SOPHOMORE YEAR course	2nd semester credits	course
3	Pro-Seminar in Secondary Education + lab	3	Pro-Seminar + lab continued
3	Social Psychology + lab	3	Urban Studies + lab
*3	Foreign Language + lab	*3	Foreign Language + lab
*3	Backgrounds in Literary Cultures	3	Backgrounds continued
*2	Creative Writing	*2	Creative Writing
3	Biological Backgrounds	1	Physical Education Interpretative Movement
		*2	Linguistics
17		17	

NB: Lab indicates: clinical observations, participation in projects, involvement in the public schools, et al, in Campus Media Learning Center and School-Community Teaching-Learning Centers.

* Elective

APPENDIX E

LIBERAL ARTS CONTENT

I. Statement of Objectives

II. Progress Report of the Committee for Liaison with Liberal Arts Departments, May, 1971

I. Statement of Objectives

A. Introduction

The importance of the Liberal Arts in a curriculum of teacher preparation is indicated in the Assumptions, Goals, and Special Features of this document and should be read in connection with this report.

The specific purpose of the following pages is to suggest those areas in the four teacher preparation curricula (Early Childhood, Elementary, Middle School, and Secondary School) where involvement on the part of the prospective teacher, in Departments outside of Education appears important, and where continuing cooperative endeavors between representatives of the Department of Education and of other Departments in the College would be needed to implement these suggestions. This direction of purpose is based on the extensive interim reports of sub-groups of the Ad Hoc Committee for Liberal Arts Content in Teacher Preparation Programs, Department of Education. These sub-groups have been working in various subject areas. At the request of the Music Department, the sub-group (Music) has been interdepartmental in its make-up. Initial contacts have been made with the Chairman of the Departments of Educational Services, Afro-American Studies, and Puerto Rican Studies. Communication has been received from the Physics Department.

Several general features of the four curriculum proposals, included in preceding sections of this document, should be recalled as being basic to some of the points made in succeeding sections of this report.

1. The Early Childhood, Elementary, and Middle Schools curricula lead to a major in Education. The Secondary Schools curriculum prescribes a major in a subject area and a concentration of 20 credits in Education.

2. All four proposed curricula are experience-centered. The prospective teacher is committed to a continuing, sequential, and intensive series of

experiences in planned school-community settings.[1] The experiences are to be developed in conjunction with course offerings in the curricula.[2] For some prospective teachers these tasks will start in the Sophomore year (e.g., Early Childhood and Elementary curricula); for others, in the Junior year.

3. An introductory, or "first", course has been devised for each of the curricula. This course is to be taught by a team of instructors. As part of the content of this course the prospective teachers will learn, and put into practice, systems of behavioral analysis; for example, techniques of analysis of logical teaching-learning systems, or of classroom behavioral environments.

B. The Liberal Arts and the Curricula

There are three broad topics which should be included in cooperative discussions between representatives of the Department of Education and of other Departments in the College on the Liberal Arts and the curricula.

1. The Specific Requirements in the current College program for the B.A. degree.
2. Suggested electives within other Departments which might be particularly appropriate for prospective teachers.
3. Contributions which Liberal Arts Departments will make to specific courses in the four curricula (Early Childhood, Elementary, Middle Schools, and Secondary Schools).

These three broad topics are detailed briefly in the following pages. The topics themselves are not exhaustive, but should be regarded as suggestions only; an initiation, and in some instances, as with the Department of Music, an extension, of joint discussion between the representatives of the Department of Education and representatives of other Departments in the College.

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[1] see Appendix A, School-Community Teaching-Learning Centers, page 148.

[2] see Appendix G, Experiences, page 238.

C. The Specific Degree Requirements (see pages)

Table I, page , scans by curricula and division, some suggested topics for discussion, with regard to the Specific Requirements for the B.A. degree. The intent here is not to alter the divisional structure of the Specific Requirements, but to give some consideration to the possible inclusion and/or development of courses which (1) might be added to or substituted for courses in the Specific Requirements, and (2) might be more relevant to the tasks the prospective teachers will probably face in the schools.

D. Suggested Electives

From within current offerings of the various Departments in the College or from new course offerings developed in response to suggestions evolving from joint discussions with representatives of the Department of Education and of other Departments in the College, suggested elective courses for prospective teachers in the four curriculum levels might be detailed.

E. Special Areas in the Curricula

1. Secondary Schools: discussion with representatives of the major subject departments to (a) review department courses for the major preparing to teach in the secondary schools with respect to the secondary school curriculum these prospective teachers will probably be implementing, and (b) to consider subject area requirements for entrance into the Secondary Education Sequence.

2. Middle Schools. Prospective teachers in the Middle Schools program are majors in Education. However, enrollees are advised to "specialize" in two subject areas. The suggestion is made that representatives of the Department of Education and of other Departments in the College explore possibilities of developing subject area courses relevant to the probable school tasks of the Middle School teacher.

3. Elementary. The Elementary curriculum includes six courses which explore the teaching-learning process in specific subject areas: Language Arts, Reading, Science, Mathematics, Social Studies, The Arts (described as Art, Music, Dance Drama, Film-making). Two curriculum/methods are currently offered in mathematics: Education 12.1 and 12.2 (Mathematics 2.1 and 2.2) Fundamental Principles of Elementary Mathematics, I and II. The suggestion is made that similar courses be cooperatively developed by representatives of the Department of Education and of appropriate College Departments in the other subject areas. In Music such cooperative work is currently under way.

4. Early Childhood. For prospective teachers in the Early Childhood curriculum there is a need to develop courses in the Liberal Arts which will be more relevant to the tasks these students will probably face as teachers. Development of such courses should be the joint responsibility of representatives of the Department of Education and other Departments of the College.

II. Progress Report of the Committee for Liaison with Liberal Arts Departments - May 1971

The attached report from a liaison sub-committee (Professors Zita Cantwell and Shirley Wedeen) outlines the work accomplished to date and planned for the future.

Electives in Liberal Arts Departments

At the present time the Department of Education is conferring with Liberal Arts Departments to accomplish three major objectives:

1. To construct Special Programs for Education Majors who wish to specialize in selected liberal arts subjects.

2. To construct separate elective courses for Education Majors who do not wish to register in these special programs (see 1 above) but wish to be given the opportunity to take electives in liberal arts which meet their needs. (All majors matriculated for a B.A. degree must take 12 elective credits in one liberal arts subject.)

3. To construct a list of Liberal Arts electives which will meet the needs and interests of students enrolled in the Middle School Sequence in Education and the Secondary Sequency in Education.

Introduction

The Committee for Liaison with Liberal Arts Departments has been charged with the tasks of (1) making initial contacts with the chairmen (or their designated representatives) of Liberal Arts Departments with respect to the proposed new curriculum of the Department of Education for the purpose of inaugurating discussions with these departments regarding the roles of their disciplines in the education of teachers in the undergraduate curriculum, (2) maintaining contact with any liaison or joint committees established to continue discussions, (3) reporting periodically on these discussions, for example, any suggested changes or developments in curriculum, to the Chairman of the Department of Education and to the Committee on Curriculum and Admission to Courses, CLAS, for discussion and possible action.

The Committee for Liaison is not a policy making committee. Its function is to make initial contact between the School of Education and Liberal Arts Departments of the College for the purpose of implementing several possible types of joint enterprises between these Departments and Education, for example, (1) special programs for Education majors in Liberal Arts disciplines such as Art, Music, Puerto Rican Studies, and Science; (2) courses in the School of Education and/or Liberal Arts Departments taught by teams of instructors from Liberal Arts and Education. Further, the Committee on Liaison has the function of maintaining continuous liaison between representatives of Liberal Arts in the various disciplines and the School of Education through that School's Committee on Curri-

culum and Admission to Courses, CLAS.

Since the Committee on Liaison began its work in April, 1971, discussions have been initiated with the Departments of Art, Health and Physical Education - Men and Women, Mathematics, Music, Political Science, Puerto Rican Studies, Science - Physics. The discussions to date are summarized in the succeeding paragraphs.

1. Art.

Initial meeting: Professors Cantwell and Wedeen met with the committee from the Art Department selected by Professor M. Dorsky, Chairman (Professors Badalamenti, Campbell, Gelber, and Holtzman). Discussions centered around (a) the possible role of the Art Department in the proposed new Education curriculum, especially in Education 50.X6 and 40.X3, (b) possible suggested electives in the Art Department for Education majors.

Current status: Discussion continuing with the Committee from Art and Professors Baum, Giventer, and Hafner from Education.

2. Health and Physical Education - Men and Women

Initial meeting: Professors Cantwell and Wedeen met with Professors Frankel, Meagher, Pollack, Schalk, and Schoenberg from the Departments of Health and Physical Education - Men and Women. This meeting was the outcome of a discussion by members of the Departments of Health and Physical Education-Men and Women with the Committee on Curriculum and Admission to Courses, CLAS, (School of Education) initiated by

Professor Duker. Discussions at this second meeting centered around the possibility of the development by the Departments of Health and Physical Education - Men and Women of two courses in Health Sciences: One designed for Education majors, the second, for prospective secondary school teachers, not majors in Health Education. Suggestions were made by the representatives from Health and Physical Education that the courses be (a) offered concurrently with practice teaching so concepts would be applied in school situations under supervision, and (b) considered possibly as required rather than suggested elective offerings.

Current status: Department of Health and Physical Education-Men and Women are working on suggested courses; Dean Impellizzeri should appoint a liaison for the School of Education.

3. Mathematics

Initial meeting: Professors Cantwell and Wedeen met with Professor Singer, Chairman of Mathematics. Discussion centered around Education 12.1 (Mathematics 2.1) and 12.2 (Mathematics 2.2) and the proposed Mathematics - Education Course, Education XX.XX: Mathematics for the Elementary School Teacher, for Education majors and the role of the Mathematics Department in the development and contribution to the proposed course.

Current status: Discussions continuing with representatives of Mathematics Department and representatives of Education (Professors Chambers and Geddes).

4. Music

Initial meeting: Professors Cantwell and Wedeen met with Professor Van Solkema, Chairman of the Department of Music. Discussions centered around (a) the possible role of the Music Department in the proposed new curriculum, especially Education 50.X6 and 40.X3, (b) possible suggested elective in the Music Department for Education majors.

Current status: Discussion continuing with representatives from Music and Professors Bronars and Dietz from Education.

5. Political Science

Initial contact: A telephone conversation with Professor Corvine, Chairman of Political Science, who suggested the Committee on Liaison contact Professor Abbot who has requested additional information about the proposed new Education curriculum.

Current status: Professors Cantwell and Wedeen will meet with Professor Abbot in September, 1971.

6. Puerto Rican Studies

The special sub-committee of Professors Allen, Beauclerk and Cantwell from Education worked with Professors Dinos and Nieves - Puerto Rican Studies on the development of a Proposed Curriculum for a Major in Elementary Education for Prospective Teachers Interested in (Option A) Teaching

The Bilingual Puerto Rican Child and (Option B) Qualifying For Certification In Bilingual Education. This curriculum has been approved by the members of the Department of Education and Puerto Rican Studies and submitted to the Curriculum Committee of the College.

7. Science - Physics

Initial contact: Professors Cantwell and Wedeen met with Professor Skorinko at his request. Discussions centered around the possibility of development of an Integrated Science elective for Education majors and the role of Science in the proposed new Education curriculum. Professor Skorinko suggested that discussions continue with Professors Gibson (Chemistry), G. Moriber (Chemistry), and Skorinko (Physics).

Current status: Discussions will continue in the Fall with these representatives from Science and a sub-committee from Education appointed by Dean Impellizzeri.

The Committee for Liaison with Liberal Arts Departments will contact the Chairmen(or their designated representatives) of the remaining Liberal Arts Departments in the Fall semester, 1971.

TABLE I: Specific Requirements for B.A. Degree: suggested topics for discussion.

Proposed Curriculum	Division I	Division II	Division III	Division IV
Early Childhood	Add Philosophy 13* to list of Specific Requirements. Development of Modern Language courses more relevant to tasks in schools, for example, add elective courses in Conversational Languages.	Basic science course more relevant to tasks in schools. Basic mathematics course relevant to school tasks be listed with Specific Requirements, for example, Mathematics 2.2.	The development of a Social Science sequence which would be more relevant to understanding cultural/environmental factors which effect teaching-learning process.	Modern Languages: see suggestion under Division I and structure appropriate basic work. Consider the revision of Physical Education requirements to include elective courses. Health Sciences; add elective courses more relevant to tasks in schools, for example, Drug Addiction.
Elementary	*Logic and Scientific Method.			
Middle Schools		Basic science course more relevant to tasks in schools. Basic mathematics course more relevant to tasks in schools.		
Secondary Schools		Requirements as in accord with major departments.		

APPENDIX F

REPORT ON INDIVIDUALIZED INSTRUCTION

I. Modern Education and Individualized Instruction

Individualized instruction as the term is used in this paper implies: 1) a degree of self-selection on the part of the student; 2) a determination of the goal to be striven for on an individual basis; 3) pacing - that is a rate of teaching-learning which is adapted to the individual learner; and 4) a shouldering of a major share of the responsibility for carrying on the teaching-learning process of the learner.

It would be inaccurate to say that individualization is now the prevalent approach in the schools of America. In fact it might be equally inaccurate to assert that a true individualization is at present a major movement in the schools. It would be entirely accurate, however, to state that there is a definitely discernible trend toward increased use of the individualized approach to teaching especially in the elementary school.

In support of this last statement the fact that only a dozen years or so ago there was not a single book available on individualized instruction coupled with the fact that now there are a number of them available[1] seems significant as it is improbable that publishers would invest in book manuscripts not likely to be in better than ordinary demand.

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1. Barbe, Walter B. Educator's Guide to Personalized Reading Instruction. Englewood Cliffs, N.J.: Prentice Hall, 1961.

   Darrow, Helen Fisher and Howes, Virgil M. Approaches to Individualized Reading. New York: Appleton-Century-Crofts, 1960.

   Duker, Sam. Individualized Reading: An Annotated Bibliography. Metuchen, N.J.: Scarecrow Press, 1968.

   Duker, Sam. Individualized Reading: Readings. Metuchen, N.J.: Scarecrow Press, 1969.

   Howes, Virgil M. Individualized Instruction as Teaching Strategy. New York: Macmillan, 1970.

In recent years the idea of individualising instruction has been given considerable impetus by each of three factors:

1. The population explosion.

2. The information explosion.

3. Technological developments.

It is obvious that the increasing number of people requires the most efficient use of the educational establishment for the simple reason that available resources are not adequate for the toleration of inefficiency. It follows of course that the most efficient manner of training teachers is of crucial importance at this time. Individualised instruction is believed by many to be the most efficient means of education not only for training teachers but for the students they will teach as well.

The geometric increase of available information makes a system where the educatee is uniformly exposed to a very limited amount of that information completely antiquated. Individualised instruction makes possible the utilisation of vastly increased amounts of this expanding supply of information on other than a mass basis.

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1. (continued)

Howes, Virgil M. Individualised Instruction in Reading and Social Studies. New York: Macmillan, 1970.

Howes, Virgil M. Individualised Instruction in Science. New York: Macmillan, 1970.

Miel, Alice (Ed.) Individualising Reading Practices. Practical Suggestions for Teaching, No. 14. New York: Bureau of Publications, Teachers College, Columbia University, 1958.

Veatch, Jeannette (Ed.) Individualising Your Reading Program. New York: G.P. Putnam's Sons, 1959.

West, Roland. Individualised Reading Instruction. Its Implications for the Teacher and Librarian. Port Washington, New York: Kennikat Press, 1964.

Technological devices such as computers, micro-forms of various kinds, television video-tapes, audio-tapes, and recordings make possible an enrichment of modes of instruction. Individualized instruction makes possible a full utilization of the devices named as well as of a multitude of other technological discoveries.

The most important distinction between individualized instruction as the term is used here and individual instruction is that in the latter mode the pace of instruction is varied to accommodate the individual learning while no distinction concerning the ultimate goal and amount of learning that must take place is drawn. Proponents of individualized learning regard this as a most unfortunate shortcoming if one takes full account of the real nature of individual differences. To these proponents it is obvious that not only the pace but the size and sometimes the nature of the task must also be varied.

While enthusiasts believe that individualization is supported by compelling logic, the unhappy fact from their standpoint is that the opposition is firmly in the saddle in the average American teacher education institution.

It seems reasonable to suppose that this general opposition to true individualization of instruction in the teacher training institution can be traced to either or both of two reasons:

1. A general opposition to change from the comfortably familiar to the threatening unfamiliar, or
2. The cost involved in establishing true individualization in terms of both money (see Appendix B) and in terms of human effort.

II. Teacher Education and Training in the Individualization of Instruction.

If, in fact, individualized instruction is as meritorious as this document assumes it is, then one would surely expect that teacher education plans for

teacher training would stress the skills of individualized instruction. The real situation is otherwise. Little more than lip service is paid to the concept of true individualization by textbooks, courses of study, and classroom activity. Faculties in many teacher education institutions accept -- and in some instances -- stress with prospective teachers those methods of teaching in the elementary and secondary schools which are based on standardized goals and purposes reached through uniform procedures.

This feeling of resistance to the concept of teaching prospective teachers the skills involved in individualization of instruction is fully shared by school personnel in those schools where students serve as student teachers and in other capacities. It is not difficult to appreciate the threatening nature of another proposal for a radical change in the fundamental approach to teaching.

Again we find that the fundamental causes of the opposition involve the matter of cost in terms of both money and human effort.

III. Individualized Teacher Education.

One of the nine teacher training institutions selected by the United States Office of Education for support in the second phase of the development of new curricula for teacher training is the University of Pittsburgh which proposed a plan for the individualization of teacher education.

An abbreviated version of the proposal made by the University of Pittsburgh is set forth in Appendix A.

How does one individualize a curriculum for teacher education?

1. It must be done before and not after curriculum is planned and/or adopted and/or put into effect.

2. It is necessary to face up to the inconsistency of talking about individual differences and about the necessity of accommodating them by individualising instruction and at the same time preserving the teacher education lockstep.

3. A bold approach needs to be supported by budget control authorities (real as opposed to surface changes cannot be made without such boldness and without adequate budgetary support - sometime somewhere this has to be faced up to - professionals will need to tell lay society what costs are necessary for proper education - it is possible that professionals might find lay society much more receptive than we think).

What are the essentials of an individualised teacher education program?

1. An admission program which will determine the suitability of candidates for admission to the teacher education program.

This should not be based on a process of elimination (as we have done in the past by the use of scholastic indexes, speech examinations, etc.) but on a process of seeing whether a teacher education program could be devised for this individual to give promise of producing a teacher of the calibre desired.

2. By individual prescription arising from consultation between student and adviser of experiences, courses, and other requirements to be made. This does not mean 3,000 programs for 3,000 students but it may well mean a large number of individually varied versions of several dozen or more basic patterns made up of elements from five or six basic programs. (The term "basic patterns" is used here in terms of the entire college experience not only as the Education sequence which may imply that the admission-counseling should take place at the time of college entrance rather than later.)

3. By setting up provisions for alteration of these individual prescrip-

tions on an individual basis when this is deemed desirable from the standpoint of the teacher education program. If all students' programs and individual requirements were computerized it would be a relatively simple matter to make such changes as might be dictated by mutual agreement of the student and his instructor or of the student and his counselor. For instance various types of experiences at first thought to be desirable may prove to be unnecessary or those not deemed to be profitable for the student might later prove on further reflection to be desirable.

4. By faculty reorientation -- Colleges can no longer talk about need for graduate work and in-service course renewal by teachers and expect that college teachers once hired and properly doctored need not receive any further teacher training. That this will create a tremendous tide of response is not an argument against the validity of the concept proposed.

5. By school reorientation - a new relationship between colleges and the schools must be established. The School-Community Teaching-Learning Centers contemplated in the new curricula are a step in this direction but how big the step is depends on the orientation involved.

IV. How Practical Is This Position Paper?

The practicality of this position paper depends on many factors: (1) the readiness of those invested with authority to have philosophical sympathy with the idea; (2) budgetary support, and (3) proper machinery to secure Foundation support.

It may well be asked whether partial implementation would be worthwhile. Probably not, because it would be equally upsetting but not equally meaningful and at best might be a simple case of paying lip service to the concept.

A pilot project is possible but even this would require a tremendous investment of time and funds. For example, the expanded resources of the Office of Student Orientation might be used for one year to interview future teacher education candidates and to create for them programs of what they do and, just as importantly, what they do not need.

V. Individualized Instruction in the Proposed Program.

Individualized instruction is a process designed to educate each student at a rate and depth commensurate with his physical, social, emotional, and intellectual growth. It does not mean, however, that a teacher works with only one student at a time. It does mean that a student works on content for which he is educationally ready and in a manner which is most efficient for him.

Individualized instruction is generic in nature and, therefore, includes a variety of methods for its achievement. For example, phasing, flexible scheduling, nongradedness, continuous progress, small group instruction, independent study, team teaching, and vocational programs.

It is apparent that the methods just enumerated are not exclusively related to individualization. Any of these methods have an equally useful role to play in a non-individualized program. For example, independent study is a viable approach even when the same task, to be completed at the same time, is assigned to all students in a class with the same expectancy as to degree of mastery. Similar examples could be given in relation to any of the other methods listed.

The Proposed Undergraduate Program outlined in the body of the major document has been planned for implementation within the framework of the larger Brooklyn College Program and it, therefore, may not meet fully the

requirements for "individualization" as specifically defined in this position paper. However, the Proposed Program has been planned and constructed with specific provisions for individual differences among the students enrolled in each of the Four Course Sequences.

Among the provisions for accommodation to individual differences among students in the Program are the following:

1. It is specifically stated in the basic assumptions underlying the entire program that provision will be made for individualized instruction (obviously not used in the narrow sense attached to the term in the present paper) and will provide for instructing students concerning strategies for taking account of individual differences in their present and future teaching experiences.

2. The informed selection by students through early orientation and counseling of one of the four options (Early Childhood, Elementary, Middle School and Secondary) is a simple recognition of individual differences in the preference of students for teaching certain age groups.

3. The provision throughout the Proposed Program of elective courses is a further implicit recognition of the necessity of providing for individual differences.

4. The provision for individual counseling of students in this program is another such example.

5. The School-Community Teaching-Learning Centers to be established in the community as a basic part of this Program are intended to provide a variety of experiences suited to the strengths and needs of the individual community in which each of the Centers is located and to the needs and strengths of each of the prospective teachers in each Center.

6. Team teaching, small group instruction, and independent study are provided for in many places in the Proposed Program.

7. Evaluation of students' performance in terms of mastery attainment of behavioral objectives will be an individual rather than a group procedure.

8. The modules and colloquia described in some of the proposals are further outstanding examples of a deliberate and purposeful design to provide for individual differences.

9. The flexible nature of liberal arts requirements is a further example.

10. Lastly, it is impossible to describe specifically the spirit that runs throughout the curriculum which implicitly as well as explicitly recognizes the existence of individual differences, the importance of these differences, and the need of providing for them.

APPENDIX A

THE UNIVERSITY OF PITTSBURGH MODEL OF TEACHER TRAINING FOR THE INDIVIDUALIZATION OF INSTRUCTION

Individualized instruction has been sought by many teachers during the short history of American education. Through the years, volumes have been written on this concept and glib speakers have urged the implementation of an instructional program geared to each learner. Unfortunately, very few examples of genuine individualization can be found today in the schools of our country. The University of Pittsburgh model of teacher training has been prepared with individualized instruction as the central theme. It is hoped that this training model will make a significant contribution to the implementation of individualized instruction.

A general definition of individualization, adopted in the model, is as follows: Individualized Instruction consists of planning and conducting, with each pupil, programs of study and day-to-day lessons that are tailor-made to suit his learning requirements and his characteristics as a learner. Thus, by definition, the individualized instruction which has been conceived in this model is marked first by planning and then by implementing the plan.

Model Features

Four structural features dominate this model for teacher training. In two of these features, flexibility and self-development, personal needs have been recognized. With the other features, mastery and efficiency, professional qualifications were acknowledged.

Flexibility was viewed as an essential feature in any endeavor which honors individualization. This attribute is evident in the model as such procedures as Alternate Learning Routes were incorporated in various learning modules. In this manner, different rates and styles of learning were accommodated.

Self-development was featured in several phases of the program. The selection process incorporates it through assessment of potential candidates. By this process, training can be adjusted for each student. Extensive group process experiences also focus on this area. Through such techniques, students learn how to help others in a group or team setting.

The Pittsburgh Model also characterized the concept of mastery. Trainees will be expected to demonstrate that learning goals have been met and movement through the program will be predicated on the evidence of mastery of specified learning goals. However, rigid standards of performance for all trainees will not be used.

Efficiency is the final feature of this teacher training plan. This trait is related to the notion of flexibility. Efficiency is a prime feature for it refers to the practice of adjusting to individual knowledge, learning style, and interests. In this way, undue delays and unnecessary repetitions are avoided.

years of pre-service education includes a focus on Professional Education, Teacher Competencies, and self-development through the Guidance requirement. Most of these experiences occur in the Clinical Setting. The trainee experiences several roles during the final two years such as Assistant Teacher, Student Teacher, and Intern.

As the trainee participates in the Clinical Setting, the dominant features of this model - flexibility, self-development, mastery, and efficiency - are manifested throughout the process. The length of Student Teaching will be adjusted in accordance to the needs of the trainee. Long-term group process experiences will be provided to avoid a superficial sensitivity to self. Evidence of specific competencies will be sought and provisions will be made for the trainee's style of learning and operational level.

Summary

The University of Pittsburgh model of teacher training for individualized instruction is a general plan. Elaborate units of extensive instructional modules have not been prepared because the model builders view the development of such instructional materials as the necessary experience of all faculties interested in the individualization of instruction.

One vital agreement reached by the team which built this model was that trainees must witness individualized instruction throughout the pre-service experiences. In this way, the concept of individualization likely will be internalized. Thus, it is assumed that graduates of this experience will make a significant contribution to the implementation of procedures leading to individualized instruction in the schools of America.

APPENDIX B

Estimated Costs of University Implementation

Rationale for Estimating Costs for Implementation

This budget approach is functional, based on the probable costs of operational units of the implementation process plus the space in which to conduct the operations. It is intended to supply a prospective user with information necessary to develop a budget appropriate for his local situation. The five major cost sources, functionally stated, are Administration and Coordination, Instructional Materials Development, Retraining Faculty, Space and Evaluation. All five can be expected to have high initial costs which will then taper off to maintenance levels. Since the full implementation of the model has not been attempted, the cost estimate below have not been validated and are subject to an uncertain degree of error. Therefore, it would be appropriate to make proper allowance for exchange of funds among functional units and to provide reasonably for contingencies.

1. Instructional Materials Development: Many specialized materials will be needed to implement individualization. Some materials can be bought and used almost "as is." Others can be adapted from commercially available items. Some must be created, all will involve cost, the last the most. Relatively little seems available for use "as is", perhaps 20% of what is needed. Another 70% could be adapted from commercial texts, films and other material, using programmers and unit writers to do the modification. That leaves 10% to be created, - that is, designed from scratch.

Instructional materials design and development and adaptation will probably account for the greatest single outlay of money in the first few years of implementation. The only hard basis for projections at hand is the cost for creating instructional materials in I.P.I. That, according to the Learning Research & Development Center staff, is $3,000.00 per clock hour of elementary school instruction. We are assuming that figure applies also for the creation of materials for higher education. We are assuming, further, that modification and adaptation of commercial material for individualization will cost approximately $500.00 per clock hour of instruction, and that "as is" material will need initial servicing to the extent of $100.00 per instructional clock hour. The above estimates include both the development of the materials and their maintenance in operation with trainees during the tooling-up period.

Assuming approximately 1800 clock hours of instruction make up a four year collegiate program and that the goal is to individualize 1200 of those hours, the following costs can be estimated:

Amount and Type of Material	Instructional Hours		Development Cost Per Hour		Cost Estimates
20% (As is)	240	x	$ 100.00	=	$ 24,000.00
70% (Adapted)	840	x	500.00	=	420,000.00
10% (Created)	120	x	3,000.00	=	360,000.00
TOTAL					804,000.00

When all the individualized instructional materials are available for use, it is estimated that it will cost $40.00 per instructional hour to maintain and replace materials as needed.

2. Retraining Faculty: Costs for released time and the tutelage of faculty in the use of individualized instruction calls for a large initial outlay and a continuing, tho' lesser, amount for a number of years. It will take on the average 20 hours of individualized instruction and supervision to equip a contemporary college faculty member to use individualized instruction at a satisfactory competency level in every-day teaching of college students. There will, of course, be a range of individual differences among faculty members, and the estimate allows for that. The cost per hour per faculty member is calculated at $50.00, including released time, personnel and materials, or $1,000.00 per faculty member for the initial 20 hours.

3. Administration and Coordination: The initiation of any activity of this complexity calls for a larger investment, at least for a time, in administration and coordination than does the conduct of a well-established program. This includes, for example, the development of the clinical component in the new way described in the specifications. Therefore, it is anticipated that one added professional person for every 50 students will be needed for the first two years, and one for every 100 students thereafter. The cost for one such person, including salary and benefits, space, facilities, secretarial support and travel is estimated at $30,000.00 per year.

APPENDIX G

EXPERIENCES

EXPERIENCES

A. Introduction.

As described in the Assumptions, Goals, and Special Features, experiences are construed to be integral features of the four proposed curricula (Early Childhood, Elementary School, Middle School, and Secondary School) throughout their entire sequence of courses. For the specific details of the experiences: the types of experiences, the behavioral objectives they are designed to implement, the locations of the experiences, the reader is referred to the course syllabi within a given curriculum. These syllabi are to be developed by appropriate groups should the curricula be implemented.

However, there are some general features which are both common and basic to the concept "experiences" as it is used throughout this document. It is these features that are described briefly in the succeeding sections of this report.

B. Role of Teacher vis à vis Role of Student.

One of the major challenges to any program of teacher preparation rests on the development of guidelines which motivate the prospective teacher to ask the questions, or see the need for information, the answers to which or the data for which educators are very ready to supply. The prospective teacher in an undergraduate program more easily identifies with a student role as opposed to a teacher role. And until the prospective teacher can be guided to make the transfer to the latter, a teacher preparation curriculum need not be as effective as it could be. The traditional "observations" leading to "practice teaching experiences" at the end of a teacher preparation program tend to foster the student role rather than the teacher role perception.

The experiences incorporated in the proposed curricula described in this

document are to be planned to help the prospective teacher identify with the teaching role. There are three characteristics of the experiences which reinforce this factor.

1) The experiences are planned to be integral parts of all courses in each of the four curricula.
2) The experiences are hierarchical and sequential in nature. The content of the experiences is developed through continuing analyses of individualized teaching-learning strategies.
3) The experiences are to be assigned on an individual basis depending upon the needs and levels of performance of a prospective teacher or a group of prospective teachers.

C. Flexibility in Teaching Behavior.

One of the aims of the four curricula presented in this document is to prepare teachers who are flexible in their approaches to classroom situations; who could approach a classroom situation from a continuing analytical view in a way which would enable them to increase their knowledge and skills. It is through the assignment of experiences, appropriate to the level of development of each prospective teacher, that this flexibility in the translation of theoretical knowledge into practice is to be fostered.

Basically, the experiences are designed to help engender continuing evaluative behavior as part of the prospective teacher's style. Learning from the experiences entails:

1) taking account of the important elements in every problem,
2) using relevant previous knowledge to develop understanding of the problem,
3) selecting and adapting the plan for solution which appears to have highest probability of success,
4) being able to evaluate the consequences of such application, and

Experiences

5) assimilating and coding in memory data from the experience.

Further, the evaluative teaching style which is to be fostered in part by sets of experiences consists of six phases: describing, analyzing, hypothesising, prescribing, treating, observing consequences. The last phase leads back to the first, describing the changed situation to begin a recycling process. (Michigan State University, 1968)

The type of behavior is very closely akin to the evaluative teaching behaviors described by Gagné as being crucial to effective classroom performance. (Gagné, 1970)

D. Hierarchical Sequence of Experiences.

The experiences are designed to permeate the totality of each one of the four proposed curricula. This leads to a consideration of "hierarchical sequence" from two views:

1) An exploration, increasing in depth throughout a sequence, of specific behavioral strategies articulated in a curriculum. For example, the objective might be stated as "Identify ideal instructional materials; their uses, utility, and sources"; one level of experience could require the prospective teacher to reflect on the knowledge of instructional materials appropriate for a stated classroom situation: their sources, uses, and needs; a second level of experience could involve observation in a classroom, detailing the processes and uses of instructional materials and teaching aids, and evaluating these processes and uses in terms of specific teaching-learning strategies.

2) An increasing complexity of involvement of the prospective teacher in community and school situations; experiences could move from tutorial work with one student to apprentice teaching experience.

The experiences will make use of the facilities offered by the Campus

Experiences.

Media Learning Center and the School-Community Teaching-Learning Center. Prospective teachers will have opportunities to develop facility in systematic-observation, use of simulation techniques, video-taping, audio taping and other components of Instructional Technology.

Different types of experiences can be expected to occur simultaneously. The various experiential situations may be sequenced horizontally or vertically. For example, a prospective teacher can be working with video-tape to build a logical teaching-learning system for a stated behavioral concept. At the same time this system is interrelated with the prospective teacher's work with adolescents in a youth center.

E. Styles of Analysis.

The prospective teacher will be expected to become familiar with techniques which will enable him to analyze behaviors which are part of assigned experiences: systematic observations, video-tape, simulation, tutorial work, classroom teaching - both behavioral environment and logical systems.

For example, to analyze logical teaching-learning systems the prospective teacher might make use of Smith's technique, and for analyzing behavioral environments, Flander's. (Flanders, 1965: Smith, 1969). These are only two of many schemes of behavioral analysis and are noted here only as examples; a curriculum syllabus may list several different schemes.

F. Information System.

A sophisticated information system must be planned if the experiences described for the proposed curricula are to be successfully implemented. Each experience must be stored for rapid retrieval. The description should include: objective of the experience; prerequisites; statement of content; setting; materials; level; method of evaluation; file.

The indexing system should be developed to permit cross-analysis of the different phases of the curriculum sequences. The capabilities of

Experiences.

cross-referencing should also extend to data on each prospective teacher. An adequate staff must be provided for implementation of the system. The staff should include at least one systems analyst familiar with the rationale and content of the four proposed curricula, and several programmers.

C. An Example: outline of possible detail for an hypothetical experience.

1. Program: Elementary.
2. Course: Education 50.X2
3. Objective: Develop an awareness of one's (the prospective teacher) self-concept and its relation to behavior.
4. Experience (general description): Work with individual pupils for short period each week for several weeks: working with student individually in school.
5. Experience (specific application): Supervised individual work in oral reading skills with four boys in grade 6 (sessions video-taped).
6. Evaluation: Analysis of behavioral environment and teaching-learning situation on the video-tapes by prospective teacher (prospective teacher has already mastered schemes of analysis); review analyses with supervisor in terms of Objective of experience (3-above), for example, analysis of the prospective teacher's attitudes and feelings and how these interact with the teaching-learning process.

This example illustrates one point on a continuum of experiences designed to illustrate the Objective (3-above). For detail in developing Experiential Sequences the reader is referred to the Michigan State University proposal (Michigan State University, 1968).

Experiences

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APPENDIX H

EVALUATION

Brooklyn College
City University of New York
Office of Testing and Research

PROJECT EVALUATION PLAN

For, Fall Semester, 1971, Phase I Implementation of
A Performance-Based Curriculum for the Education
of Teachers at Brooklyn College

Prepared by:
Professor Zita M. Cantwell
June, 1971

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Miss Priscilla Hilliard	Middle Schools Team
Mrs. Maureen Marazzi	Secondary Schools Team
Professor Karel Rose	Elementary Schools Team

Each offered contributions which were of value in clarifying issues and refining the structure of the Evaluation Plan.

However, final responsibility for the Report, contents and style, rests with me.

Zita M. Cantwell

Forward

Two factors should be kept in mind as one reads this Report: (1) the pace of implementing the Evaluation Plan and the importance of individualization in First Course implementation, and (2) the funding of the Evaluation Plan.

1. Pacing the implementation of the Evaluation Plan and individualization in First Course implementation.

Certain parts of the Evaluation Plan are to be implemented in the Fall Semester, 1971, others, to be planned and "tried out" (see Chart 1, page iii). The importance of allowing maximum scope for individualizing implementation of Phase I and the complexity of the tasks describe a line of demarcation between evaluation activities completed and those planned.

For example, <u>if</u> during a First Course education students-Phase I are assigned to tutor a public school student on a regular basis a suggestion is made for assessing the latter's progress (see pages 17 & 18). Namely, that a <u>diagnostic exercise</u> be selected by the B.C. Supervisor and used, by the education student-Phase I under supervision, to identify needs (before tutoring) and measure development (after tutoring) of the public school student being tutored on a regular basis by the education student-Phase I.

Diagnostic exercise is used here in its widest meaning because members of the Phase I Implementation Teams will have to consider the needs of the students being tutored, the level of development of education students-Phase I, and the goals of the First Courses, as well as the materials available, the purpose of tutoring, and its relation to the regular class work of the students.

Some of these decisions cannot be made until the Phase I Implementation Teams and education students-Phase I are working in the schools implementing the First Courses. Therefore, this evaluation activity would be planned, rather than completed, during the Fall Semester, 1971.

2. Funding the Evaluation Plan.

No aspect of this Evaluation Plan can be implemented unless the Plan is funded. No funds are available in the Office of Testing and Research budget for evaluating Phase I implementation.

Chart 1. Proposed Schedule of Implementation for Project Evaluation Plan.

Task	Fall Semester, 1971: planned	"tried-out"	implemented
1. Goals & specific experiences (page 11).			
2. Detail of personnel, facilities, equipment, & time needed to implement Phase I (page 12).			
3. Descriptive data from schools, communities, & College (pages 13 to 15).			
4. Measures of subject area knowledge; for student teachers (pages 14 & 15).			
5. Measure of understanding of principles of human development, philosophy & sociology at time enter sequence; for education student-Phase I (pages 13 & 14).			
6. Observation: use of media as a tool for behavioral analysis (page 16).			
7. Observation: working with individuals or groups in school situations (page 17).			
8. Observation: working in the community (page 19).			
9. Observation: student teaching (page 20).			
10. Measure of First Course attainment (page 21).			
11. Perceptions of performances of education students-Phase I and student teachers (page 22).			
12. Project Self-Study (page 23).			

Introduction

The Evaluation Plan outlined in this Report is directed toward a study of the Phase I implementation of A Performance-Based Undergraduate Curriculum for the Education of Teachers at Brooklyn College. Phase I implementation is concerned specifically with putting into operation the First Course for each of the four levels (early childhood, elementary, middle, and secondary) of this performance-based curriculum. The Phase I implementation is highly complex and crucial if for no other reasons than that it involves supervising and moving 314 Brooklyn College undergraduates (education-students-Phase I and student teachers) through a series of experiences centered in the schools and communities and it is the initial implementation of this curriculum. In the course of Phase I implementation new patterns of communication will be seen among the schools, the communities, and the College.

The intricacies of Phase I implementation have influenced the development of the Evaluation Plan:

1. A project evaluation plan is described in this Report in which attention is directed to a study of significant aspects of the curriculum which are common to the four levels and which are so defined (for evaluation purposes) as to allow for individual differences between and within Phase I Implementation Teams in actual operations.

2. Further, the project evaluation plan can be adapted to succeeding phases of the performance-based curriculum as they are implemented.

3. Since the Fall Semester, 1971, is the first "run through" for Phase I of the new curriculum, the evaluation for this

semester will be "developed" along with the curriculum implementation; part of the Evaluation Plan will be implemented, part refined in on-site planning (see page 6).

4. The activities of the Evaluation Plan will interfere as little as possible with Phase I Implementation.

5. Those responsible for implementing the Evaluation Plan will welcome and will give careful consideration to comments and suggestions from members of the schools, communities, and College as work proceeds during the semester.

Basic Assumptions

The following assumptions underly the Evaluation Plan for the implementation of Phase I of the performance-based curriculum.

1. The evaluation program, as approved by the Department of Education, will be completed by the Office of Testing and Research.

2. The emphasis of the Plan of Evaluation is on the study of the development of the individual. The data analyses and presentations will focus on individual rather than group change. However, all participants will become anonymous in this evaluation.

3. No segment of data collected for this evaluation is to be used in any way in the grading or other assessment of any participant. The original data will not be discussed with or interpreted to any individual.

4. As soon as original data are coded they will be destroyed. Coded data for participants will be kept by the Office of Testing and Research so each one may be followed through the performance-based curriculum. Any video- or audio-tapes which are held for follow through purposes will be identified by code. Such materials will be used only for purposes of evaluation.

5. Final responsibility, after consultation with appropriate individuals, for the development and choice of scales and other instruments used for this evaluation rests with the Office of Testing and Research on approval of Department of Education.

6. Participants in the implementation of the performance-based curriculum will be asked to make significant contributions to the evaluation procedure. However, no participant will have a role in analysis of data gathered for evaluation purposes.

Liaison

The Evaluation Plan described in this Report cannot be carried on at all until efficient liaison procedures are established between those responsible for Evaluation and the schools, the communities, and those at the College (staff and students) participating in the Phase I implementation.

No aspect of the Evaluation Plan will be put into operation until it has been discussed with the individuals or groups or representatives of institutions on whom it will have an impact.

Responsibility for maintaining liaison rests with the personnel of the Office of Testing and Research.

Topics Studied

The following topics, significant to Phase I implementation and to the entire performance-based curriculum, are studied in this Evaluation Plan.

1. School/Community/College relations (Project Self-Study, page 23).
2. Descriptions of communities, schools, and the College during Phase I implementation begins (pages 13 to 15).
3. Systematic records of course content, experiences, and

all personnel, equipment, facilities, and time needed to completely implement Phase I (Content Analyses, pages 11 to 12).

4. Observations of performances of participants (education students-Phase I and student teachers) in Phase I implememtation in selected activities (pages 16 to 22).
5. Detailed description of the process of Phase I implementation (Project Self-Study, page 23).

Nature of the Evaluation Plan

The Evaluation Plan represents the initial phase of a project evaluation of the implementation of a performance-based curriculum. "Project" implies that the operations and requirements of the curriculum itself, rather than the design of the research and the needs of basic hypotheses, set the constraints on the Evaluation Plan. (see Grobman, H. Developmental Curriculum Projects: Decision Points and Processes. Itasca, Ill.: Peacock Publishers, Inc., 1970.)

Or as Suchman notes in a closely related view, "evaluative research is....a process of stating objectives, in terms of ultimate, intermediate, or immediate goals, of examining the underlying assumptions, and of setting up criteria of effort, performance, adequacy, efficiency, and process". (Suchman, Edward A. Evaluative Research: Principles and Practices in Public Service and Social Action Programs. New York: Russell Sage, 1967. P. 71.)

The proposed procedures of analysis have been designed to focus more on formative than on summative evaluation; on a design directed toward studying the process of implementation and the adaptation of a curriculum (Phase I implementation) to school situations (college, secondary, and elementary) and environmental

realities.

Third, what is proposed here is not a "complete" evaluation. "The accomplishment of a complete evaluation is an impossibility. It would take too long. It would be too expensive. The materials evaluated would be obsolete before such an evaluation could be completed" (Grobman, p. 2[illegible]). What is proposed here is a plan of evaluation that will provide on a regular basis data which can be used as a source of information for decision making as the curriculum is being implemented and adapted and as it continues to function.

The proposed Evaluation Plan includes a study of selected aspects of the Phase I implementation of the new curriculum. The Plan includes a study of the curriculum and a study of the process of implementation for the purpose of providing information for objective change.

Implementation of the Evaluation Plan

The major function of the Plan of project evaluation outlined in this Report will be to provide information which can be of use in decision making about a performance-based curriculum of teacher preparation. Any Reports written will be structured toward providing data relative to such questions as: (1) "What was done?" (e.g., Content Analysis, page 11); (2) "How was it done?" (e.g., Content Analyses, pages 11 to 12); (3) "How well - economically, efficiently - was it done?" (e.g., Content Analysis, page 12); (4) "How much was accomplished relative to the stated immediate goals of the First Courses?" (e.g., Content Analysis, page 11, Classroom Tryouts, pages 13 to 22); (5) "Did behavioral changes occur relative to the First Courses?" "Were the changes in the planned

direction?" (e.g., Classroom Tryouts, pages 13 to 22); (6) How did Phase I implementation effect school/community/College relations?" (e.g., Project Self-Study, page 23).

The Fall Semester, 1971, is to be considered an implementation and planning semester for the Evaluation Plan; certain categories of the Plan are to be completed, others, because of the nature of Phase I implementation, are to be planned. These are listed below.

1. Categories to be completed (in whole or major part)
   a. Demographic data on schools, communities, Brooklyn College (pages 13 to 15).
   b. Content Analyses: (1) systems charts of goals and experiences (page 11), and (2) systematic descriptions of all personnel, equipment, facilities, and time needed to implement Phase I (page 12).
   c. Student teacher observations (page 20).
   d. Perceptions of performances in First Courses (page 22).
2. Categories to be planned
   a. Observations of selected activities in First Courses (pages 16 to 21).
   b. Measuring instruments for (1) subject area knowledge (page 14), (2) understanding of concepts of human development, educational philosophy, sociology (page 14), and (3) knowledge acquired in First Courses (page 21).
   c. Standardized log-forms for Project Self-Study (page 23).

Definitions

1. Education Student-Phase I: a Brooklyn College student enrolled in one of the four First Courses (Education 40.X, 50.X, 55.X, 60.X[1]) in the Phase I implementation of the new curriculum.
2. Student Teacher: a Brooklyn College student enrolled in any section of Methods and Supervised Instructional Experience (Education 51.1-51.4, 51.1-51.2, 52.1-52.4, 61.01/62.01, 62.01/62.02) working with a Phase I Implementation Team..
3. Student: an elementary or high school student enrolled in one of the public schools cooperating with Phase I implementation.
4. B. C. Supervisor: a Brooklyn College instructor working with student teachers or education students-Phase I as a member of a Phase I Implementation Team.
5. Cooperating Teacher or Cooperating School Personnel: public school personnel working directly with Phase I implementation.
6. Cooperating Community Personnel: individuals in the communities working directly with Phase I implementation.

Populations

1. Education Student-Phase I: those Brooklyn College students enrolled in Education 40.X, 50.X, 55.X, 60.X[1] in the Fall Semester, 1971.
2. Student Teacher: those Brooklyn College students enrolled in sections of the Education 50's & 60's working with Phase I implementation Teams. (Educ. 40.X: Educ. 51.1-51.4; Educ. 50.X: Educ. 52.1-52.4; Educ. 55.X: Educ. 51.1-51.4 & 52.1-52.4; Educ. 60.X: Educ. 61.01/62.01 & 61.02/62.02.)
3. Student: students in elementary and secondary schools cooperating with Phase I implementation who are in classes in which (a) education students-Phase I and/or (b) student teachers are working in connection with the implementation of Phase I.

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[1] these course numbers are taken from A Performance-Based Undergraduate Curriculum for the Education of Teachers at Brooklyn College; they are used for clarity and are not official College course numbers (as of June, 1971).

(Figures as of June, 1971)

Sequences & Schools	N of students: New Curric.	Educ. 50's & 60's	
1. Early Childhood			
PS 44	25+	10+	Ed. 51.1-54.1
PS 9	25#	13#	" " "
PS 307		15+	" " "
PS 152 or 180	—	12#	" " "
Total	50	50	
2. Elementary			
PS 305	50	20	Ed. 52.1-52.4
3. Middle			
IS 258	33		
PS 20		12	Ed. 51.1-51.4
PS 270		23	Ed. 52.1-52.4
JHS 117	—	—	
Total	33	35	
4. Secondary			
Sands Jr. Hi. (265)	10*	6	Ed. 61.01/62.01
Prospect Heights	10*	7	(10 students)
Brooklyn Tech.	10*	7	Ed. 61.02/62.02
in Community	10*	—	(10 students)
Total	40	20	
5. TTT			
PS 44	8 (50.X)	8	Ed. 51.1-51.2

+ = A group.

= B group.

* = rotate every 4-weeks; total N (40) of students complete all four experiences.

Outline of Evaluation Plan

The Evaluation Plan is divided into two broad categories and subcategories as follows:

I. Evaluation of the performance-based curriculum which is being implemented in Phase I (that is, the First Courses: Education 40.X, 50.X, 55.X, 60.X[1], on the four levels).

A. Content Analysis

1. Systems charts of goals and specific activities or tasks assigned during the semester to direct education students-Phase I in development toward goals; similar analysis of methods and supervised instructional experience courses offered as part of Phase I implementation.

2. Systematic detail of all personnel, equipment, facilities, and time needed to implement Phase I.

B. Classroom Tryouts

1. Descriptions of selected characteristics of the public schools, the communities, and the College at the start of implementation activities for Phase I.

2. Study of selected aspects of (a) First Courses of the curriculum as they are being implemented at the four levels, and (b) Methods and Supervised Instructional Experiences courses being offered in conjunction with Phase I implementation.

II. Evaluation of the process of implementing the performance-based curriculum in Phase I.

Project Self-Study or detail by participants (in schools,

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[1]see note on course numbers, page 7.

communities, College) of day-to-day activities of work of implementation.

The topics included in this outline are expanded on the pages following.

I.-A.-1. Content Analysis: systems charts of goals and concomitant activities and tasks.

1. Task.
   a. Development of systems charts detailing
      1) Goals for First Courses (40.X, 50.X, 55.X, 60.X[1]) stated in behavioral terms.
      2) Specific activities or tasks which have been, or are being, developed to direct progress of education students-Phase I toward goals. (Detail would include number of students completing task, duration of task, location, etc.)
   b. Need: goals and associated tasks or activities for each First Course.
2. Approach to Task.
   Systems charts developed by members of the staff of the Office of Testing and Research in consultation with members of Phase I Implementation Teams.
3. Staff.
   *a. Education Specialist familiar with curriculum and the application of systems analysis to educational research. (To work in consultation with members of Phase I Implementation Teams.)
   *b. Research Assistant.
4. Time Schedule.
   The content analysis will be worked on as the First Courses are being implemented in the Fall Semester, 1971. A preliminary Report of this phase of the Evaluation Plan should be completed by the end of the Fall Semester, 1971.

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[1] see note on course numbers, page 7.

* member of staff of Office of Testing and Research.

I.-A.-2. Content Analysis: systematic description of all personnel, equipment, facilities, and time needed to implement Phase I.

1. Task.
   a. Detailed descriptions of all personnel, equipment, facilities, and time needed to implement Phase I, e.g.:
      1) Time spent: education students-Phase I, student teachers, B. C. Supervisors, cooperating school personnel.
      2) Equipment (Media): type, use, service, location.
      3) Space: amount, type, location, use.
      4) Items of no cost to Brooklyn College but of cost to participants in Phase I implementation (e.g., time for team planning, travel).
2. Approach to Task.
   a. Systems for gathering and presenting descriptions of all personnel, equipment, facilities, and time needed for Phase I implementation developed by member of staff of Office of Testing and Research.
   b. Data gathered by members of staff of Office of Testing and Research in consultation with members of Phase I Implementation Teams.
3. Staff.
   *a. Education Specialist familiar with application of systems analysis to educational research.
   *b. Research Assistant.
4. Time Schedule.
   This aspect of Content Analysis will be worked on as the First Courses are being implemented in the Fall Semester, 1971. A preliminary Report of this phase of the Evaluation Plan should be completed by the end of the Fall Semester, 1971.

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*member of staff of Office of Testing and Research.

I.-B.-1. Classroom Tryouts: descriptions of selected characteristics of the schools, communities, and College at the start of Phase I implementation.

1. Task: descriptive categories.

a. The Public Schools.

1) The Staff.

a) N & assignment.

b) Years of experience.

c) Educational background: highest level, latest date, preparation for teaching, special preparation.

d) Area of specialization.

e) Equipment can use.

f) Experience in working with (1) student teachers, or (2) auxiliary aides.

g) Languages spoken.

2) The Students.

a) N, by grade.

b) Ethnic group membership.

c) Chronological age, by grade.

d) Level of school performance (possible sources of such data: grades in school, teachers' assessments).

Reading level.

e) Languages spoken

3) Daily attendance (by grade).

4) Average class size.

5) Special services: described by

a) type,

b) staff,

c) equipment & facilities for,

d) proportion of student body (or parents, or community) served.

6) Materials (especially media for instruction).

a) Library: categories of books, how organized, how used.

b) Media:

1) Inventory by type, availability, supplies for.

2) Use.

7) Community functions for which school used.

Community services (e.g., college or high school equivalency classes) offered by the school.

b. The Communities (areas immediately served by the schools).

1) Data on average income
occupations available in area
economic activity level
ethnic groups . . . . . .

2) Services (e.g., social, welfare) available in area.

3) Map description of communities (preferably with illustrations designed to describe varieties of life styles in communities).

4) Educational services offered in community (e.g., high school equivalency classes).

c. Brooklyn College.

1) Education Students-Phase I & Student Teachers.

a) College programs.

b) Academic index.

c) Classification number.

d) For student teachers: knowledge of subject areas they will be teaching in the schools.

e) For education students-Phase I: understanding of principles of human development & philosophical & sociological principles at time entering the teacher education sequence.

f) Languages spoken.

2) B. C. Supervisors.

a) Field of specialization.

b) Assignment in Phase I implementation of performance-based curriculum.

1) First Course (40.X, 50.X, 55.X, 60.X[1]).

2) Methods & Supervised Instructional Experience.

3) Other.

(For above 3-categories include description of assignment and time spent on each aspect.)

2. Approach to Task.

a. Liaison: no part of the material described above can be collected until the Plan and its ramifications have been discussed with B. C. Supervisors, B. C. students in Phase I implementation, representatives of the schools and communities. The importance of adequate liaison is discussed in this Report on page 3.

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[1] see note on course numbers, page 7.

b. Demographic data (including community area studies): sub-tasks defined and methods for data collection, storage, and presentation detailed by members of the staff of the Office of Testing and Research. Data collection by members of the staff of the Office of Testing and Research in consultation with appropriate groups, agencies, or individuals.

c. If teacher assessmemts are to be used as a method of describing level of performance of public school students, they are to be collected by a member of the staff of the Office of Testing and Research.

d. Development of instruments for determining level of knowledge of subject areas for student teachers and for describing understanding of principles of human development, philosophical and sociological principles education students-Phase I possess when they enter teacher education sequence: developed by an Evaluation Specialist in the Office of Testing and Research in consultation with members of Phase I Implementation Teams and B. C. Supervisors of Methods and Supervised Instructional Experience involved in Phase I implementation.

3. Staff.

*a. Director of Evaluation Project: immediately involved with liaison.

*b. Education Specialist in urban anthropology.

*c. Evaluation Specialist.

*d. Research Assistant.

4. Time Schedule.

a. Collection of demographic and descriptive data during Fall Semester, 1971.

b. Development of measuring devices during Fall Semester, 1971 (they will not be ready for use in this semester).

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*member of staff of Office of Testing and Research.

1.-B.-2. Classroom Tryouts: study of selected aspects of the First Courses or of student teaching during Phase I implementation.

A. Use of media (video- and audio-equipment) as a tool for behavioral analysis.

1. Task.

a. Education student-Phase I should be able to state a behavioral construct, video- or audio-tape a situation representative of the construct, and write an analysis of the tape.

b. Assumption: in conjunction with the content of the First Courses the education students-Phase I will learn a technique of behavioral analysis, will learn how to use the equipment, and will obtain supervised practice in using media as a tool for behavioral analysis.

c. For evaluation: two times during a semester (e.g., 6th and 12th weeks) each education student-Phase I will be asked to video- or audio-tape and analyze a behavioral situation. Content of the work of each education student-Phase I will be analyzed by three Education Specialists in behavioral analysis for purposes of noting individual changes in behavior of education students-Phase I.

2. Approach to Task.

a. Members of the staff of the Office of Testing and Research work with Phase I Implementation Teams to become familiar with tasks and procedures of analysis education students-Phase I are using in their work for this aspect of the First Courses; work on tasks for evaluation.

b. Scale used for analysis of evaluation tasks developed by Education Specialists in behavioral analysis who have been working with Phase I Implementation Teams.

c. Members of staff of Office of Testing and Research work with education students-Phase I and Phase I Implementation Teams describing evaluation task, scheduling task, distributing and collecting materials and data.

3. Staff.

*a. Education Specialist in human development and behavioral analysis.

**b. Consultants to analyze results of evaluation task: Education Specialists in human development, philosophy, and sociology.

*c. Research Assistant.

4. Time Schedule.

Plan during Fall Semester, 1971, as First Courses are being offered for the first time; possible try-out of evaluation task in "staged" situation.

B. Working with individual students or groups in school situations.

1. Task.

a. Education students-Phase I should develop facility in working with individual students or small groups of students applying principles of human development in learning situations.

b. Assumption: Education students-Phase I will

1) work informally (and with little continuity of student or group) with individual students or small groups of students in a school setting during the Fall Semester, 1971, or

2) tutor different students or small groups of students in different subject areas during the Fall Semester, 1971, or

3) interact with school or classroom groups and individuals during the Fall Semester, 1971, or

4) tutor (consistently) a student or small group of students in a subject area (e.g., Reading, Mathematics) for the Fall Semester, 1971.

c. For evaluation of regular tutoring (b. 4)-above).

1) Progress of public school students in subject in which being tutored: education student-Phase I will administer, under supervision, a diagnostic exercise designed

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* member of staff of Office of Testing and Research.

** not regular member of College staff; selected by Office of Testing and Research.

to identify areas of strengths and weaknesses in selected subject area; will determine, under supervision, aspect of subject area for tutoring activity; at end of semester (or appropriate interval) education student-Phase I will readminister diagnostic exercise and note student's progress.

2) Development of education students-Phase I in working with students in tutorial situation: each education student-Phase I observed (by using video-tape or by classroom visit) by Education Specialist in human development/methods two (possibly three) times during the semester.

For evaluation of <u>other</u> alternatives (b. 1), 2), or 3)-above):

Informal observations the nature of which are to be worked out as First Courses are implemented and tasks and activities are developed and assigned.

2. <u>Approach to Task</u>.

a. Members of the staff of the Office of Testing and Research work with Phase I Implementation Teams to become familiar with tasks and procedures of analysis education students-Phase I are using in their work for this aspect of the First Courses.

b. Scale used for analysis of evaluation tasks developed by Education Specialists in human development/methods who have been working with Phase I Implementation Teams.

c. Members of the staff of the Office of Testing and Research work with education students-Phase I, Phase I Implementation Teams, and cooperating school personnel describing evaluation tasks, scheduling and completing observations.

3. <u>Staff</u>.

*a. Education Specialist in human development/methods.

**b. Consultants to analyze observations: Education Specialists in human development/methods.

*c. Research Assistant.

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* member of staff of Office of Testing and Research.

** not regular member of College staff; selected by Office of Testing and Research.

4. Time Schedule.

Plan during Fall Semester, 1971, as First Courses are being offered for the first time; possible try-out of evaluation task in "staged" situation.

C. Working in the Community.

1. Task.

a. Education student-Phase I able to identify and analyze situations exemplifying human development modified by interactions of individuals or groups with environment.

b. Assumption: (1) Education student-Phase I will obtain supervised practice in observing individual and group activities in a variety of community settings and of analyzing these situations in developmental terms according to a technique of analysis with which he becomes familiar, or (2) Education student-Phase I will observe and informally discuss and analyze individual and group interactions in non-school settings.

c. For evaluation (b. 1)-above): two times during the semester the education student-Phase I will be asked to observe a particular event in a community setting and to analyze the event in terms of human development and environmental interplay. Content of work of education students-Phase I will be analyzed by Education Specialists in human development, philosophy, sociology.

For evaluation (b. 2)-above): informal observation to be worked out as First Courses are implemented.

2. Approach to Task.

a. Members of staff of Office of Testing and Research work with Phase I Implementation Teams to become familiar with this aspect of First Courses.

b. Scale to be used for evaluation task developed by Education Specialists in human development, philosophy, and sociology.

c. Members of staff of Office of Testing and Research work with education students-Phase I and Phase I Implementation Teams describing observation and evaluation tasks,

scheduling tasks, distributing and collecting materials and data.

3. Staff.

*a. Education Specialist in human development.

**b. Consultants to work on evaluation task: Education Specialists in human development, philosophy, and sociology.

*c. Research Assistant.

4. Time Schedule.

Plan during Fall Semester, 1971, as First Courses are being offered for first time; possible try-out of evaluation task in "staged" situation.

D. Observation of Supervised Instructional Experience.

1. Task.

a. Student teachers in sections of Education 51.1-51.4, 51.1-51.2, 52.1-52.4, 61.01/62.01, 61.02/62.02 will be working in conjunction with Phase I Implementation Teams doing practice teaching.

b. Assumption: student teachers will be teaching classes, small groups, or individual students under supervision.

c. For evaluation: student teachers observed (by video-tape or classroom visit) three times during semester; observations completed by Education Specialists in methods who are not B. C. Supervisors of student teaching. Focus on individual student teacher progress.

2. Approach to Task.

a. Staff of Office of Testing and Research work with B. C. Supervisors, student teachers, and cooperating teachers to plan observations.

b. Observation schedule selected or developed by Education Specialists in methods after consultation with Supervisors.

3. Staff.

*a. Education Specialist in methods.

**b. Consultants, Education Specialists in methods, to complete observations and analyses.

*c. Research Assistant.

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* member of staff of Office of Testing and Research.

** not regular member of College staff; selected by Office of Testing and Research.

4. Time Schedule.

Select observation scale and complete at least two observations for each student teacher during Fall Semester, 1971.

E. Education student-Phase I has acquired certain knowledge in First Courses.

1. Task.

a. Education student-Phase I has acquired certain concepts and principles and problem solving techniques with regard to human development and educational philosophy and sociology.

b. Assumption: education student-Phase I will have acquired certain sets of concepts, principles, and problem solving techniques which can be identified in terms of objectives of First Courses.

c. For evaluation: objective test (probably multiple-choice) developed to determine whether education students-Phase I have acquired material, and depth to which acquired.

2. Approach to Task.

Objective test(s) developed by Evaluation Specialist in consultation with members of Phase I Implementation Teams, and with Education Specialists in human development, philosophy, and sociology.

3. Staff.

*a. Evaluation Specialist.

*b. Education Specialist(s).

*c. Research Assistant.

4. Time Schedule.

Objective test to be developed during the Fall Semester, 1971; try-out for test during this semester.

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* member of staff of Office of Testing and Research.

F. Perceptions of performances of education students-Phase I and of student teachers by B. C. Supervisors and B. C. education students-Phase I and student teachers (of themselves).

1. Task.

   a. Education students-Phase I and student teachers will exhibit certain behaviors during First Course activities and during student teaching, respectively, which can be perceived and reported by B. C. Supervisors and by these B. C. undergraduates, themselves.

   b. Assumption: during Phase I implementation education students-Phase I and student teachers will be working in situations in schools, communities, and the College which will call upon them to respond to and interact with individuals or groups of students and adults from diverse socio-economic and cultural backgrounds.

   c. For evaluation: scales designed to allow individuals listed in a-above to describe certain behaviors as exhibited by education students-Phase I and student teachers.

2. Approach to Task.

   a. Members of staff of Office of Testing and Research assigned to task become familiar with activities of First Courses and of student teaching.

   b. Scales developed by Evaluation Specialists in consultation with members of Phase I Implementation Teams, education students-Phase I and student teachers.

3. Staff.

   *a. Evaluation Specialist(s).

   *b. Research Assistant.

4. Time Schedule.

   Scales developed during Fall Semester, 1971; may be ready for use by end of that Semester.

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* member of staff of Office of Testing and Research.

II. Project Self-Study: detailed analysis of the process of implementing Phase I made by the participants in the implementation.

1. Task.

Give all participants in Phase I implementation the opportunity to describe what occurred in the day-to-day implementation operations and to note the impact they feel these occurrences had on themselves, the schools, the communities, and the College.

2. Approach to Task.

a. Standardized log-forms will be devised for (a) B. C. Supervisors, (b) other B. C. staff involved in implementation, (c) education students-Phase I: in schools and in communities, (d) student teachers, (e) cooperating school personnel (e.g., administrators, teachers, aides), and (f) cooperating community personnel.

b. The logs will be designed to enable these participants to report in detail on the process of implementing Phase I of the performance-based curriculum. The logs will include provision for comments on (a) the performance-based curriculum-Phase I in operation, and (b) the tasks of implementation.

c. The standardized log-forms will be devised by an Evaluation Specialist in consultation with appropriate personnel.

3. Staff.

*a. Evaluation Specialist.

*b. Research Assistant.

4. Time Schedule.

Planned during the Fall Semester, 1971.

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* member of staff of Office of Testing and Research.

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EVALUATION

A. Introduction.

Suchman (1967, page 71) defines evaluative research as a "process of stating objectives, in terms of ultimate, intermediate, or immediate goals, of examining the underlying assumptions, and of setting up criteria of effort, performance, adequacy, efficiency, and process". Such a descriptive statement can well give general direction to the following outline of suggested evaluation procedures for the proposed curricula detailed in preceding sections of this document.

This report is both an outline and a comprehensive plan of evaluation. It is an outline in the sense that selection of standardized data gathering instruments and development of other techniques of data gathering will depend upon (1) the content of course syllabi for each of the four proposed curriculum documents which is to be developed by appropriate committees, and (2) the assistance of the Brooklyn College staff who are participants in the programs, prospective teachers, and cooperating school personnel in the development of those data collection instruments the responses to which are dependent upon their perception of the teacher preparation programs in operation. The report includes a comprehensive plan in terms of (1) a longitudinal study of undergraduate students who complete the teacher preparation program through their first two years of teaching, (2) the varieties of data which are to be collected, and (3) the behavioral domains which are to be sampled.

B. The Evaluation of Teacher Preparation Programs: A Model.

Broadly considered one can postulate five categories of criteria against which the success or failure of teacher preparation programs can be evaluated. These categories are hierarchal in nature; one step up the ladder requiring

input of data from the preceding step. However, each category is complete within itself; the results of data analyzed within the limits of its criterion provide a given set of information. All five categories need not be used to evaluate a program.

The first category considered is Effort, that is the success of the quantity and quality of the varieties of activity which take place in a program. The focus of this aspect of the evaluative task is on the amount of input or energy used by a program regardless of the output. Questions to be asked at this stage could be: What was done? How was it done? How well was it done?

Assessment of the results of the effort or of the Performance constitute the second category of evaluative criteria. Any attempts to get at quality of performance, especially in behavioral domains: cognitive, affective, social, require specific statements of objectives related to the proposed curriculum documents (statements of objectives by level of course, including experiences). How much was accomplished relative to the stated immediate goals of the course? Did not behavioral change(s) occur relative to the course? Were the changes in the planned direction?

Further, it should be briefly noted that performance can be measured on several levels (in terms of depth) depending upon the over-all evaluation plans and the elegance of the techniques available for describing performance.

In addition to measuring just the results of effort or performance, criteria for assessing a teacher preparation program can be further developed to describe the Adequacy of Performance, or the degree to which effective performance is adequate to the total amount of need for the teacher preparation program. This is an extremely challenging criterion of evaluation to handle, not as much in the selection of the actual tools of assessment, as in the reduction of program goals to operational or testable hypotheses.

This is also a relative criterion of evaluation: How high have the goals been set? High, here, can be defined in terms of program depth, both in variety of experiences and follow-through of prospective teachers until the completion of two years of teaching; or, it can be defined in terms of the various levels within the teacher preparation program; or, it can be defined in terms of the variety of tasks that fall within the scope of "the teaching function" and the program responses to meet needs for the preparation of educational personnel to meet this multiplicity of tasks.

When consideration is given to a teacher preparation program in terms of adequacy of performance the total needs of the Community most immediately served by the institution engaged in teacher preparation must also receive consideration: the number of students in the schools; the educational needs of these students.

Basically this amounts to a consideration of the effectiveness of the program over the denominator of the total need for the program. At this juncture it is very necessary to distinguish between effectiveness and impact. For the program may be highly effective but have a negligible impact because it has been planned to be able to serve only a small number of the total potential population, either of prospective teachers or students.

Criteria for determining adequacy must display a realistic awareness of what is possible with any given set of materials, knowledge, and finances. Interest needs to be focused on increments of progress.

Closely related to adequacy of performance is the criterion of Efficiency, which is basically a ratio between effort and performance. The efficiency of a teacher preparation program would be described in terms of costs: money, time, personnel (staff, prospective teachers, students), materials and resources. It would include also suggested alternate methods of achieving the same ends more economically but no less effectively.

Up to this point, the four categories (Effort, Performance, Adequacy of Performance, Efficiency) of criteria have been at a descriptive level. These four of themselves constitute a good approximation of evaluation of a teacher preparation program.

The fifth category, Process, is an attempt to determine how and why a given program of teacher preparation produces the results it does; those anticipated in the defined program goals and those unanticipated.

Usually four major dimensions are studied in an analysis of program process: attributes, recipients, conditions and effects produced. Each dimension is worked with in detail. For example, effects produced could be broken down to consider duration of effect, type of effect (cognitive, attitudinal, behavioral).

Each of these five categories of criteria can be studied at three levels of program goal implementation: long range, intermediate, and immediate. (Suchman, 1967).

C. Types of Data to be Collected.

The types of data needed to evaluate a teacher preparation program will be subsumed under four broad categories: (1) Data Needed about Prospective Teachers as They Start a Teacher Preparation Program, (2) Data Collected about Students at Specified Critical Points Throughout the Teacher Preparation Programs, (3) Teaching Performance Data Collected from the First Supervised Instructional Experience Sequence through the Second Year of Teaching: Data Prior to Entry into Supervised Instructional Experience. (4) Data Needed for Cost Effectiveness. (Gage, 1963; Michigan State University, 1968; Syracuse University, 1968; Tyler, Gagné, Scriven, 1967; University of Georgia, 1968).

As indicated in the introductory section of this Report, specific data collection instruments will not be specified until the proposed curricula are more completely described.

1. Data Needed about Prospective Teachers as They Start a Teacher Preparation Program (at the beginning of the professional sequence).

At what is essentially the "input" level of data collection Gage (1963), suggests a multi-theoretical approach which focuses on gathering a variety of appropriate descriptive data about students in a teacher preparation program.

a. Student knowledge at the start of training.

1) Standardized achievement type data available when undergraduate student admitted to College.

2) Data on high school performance: For example, academic grade point average; program, that is description and number of credits for various subject areas.

3) College program prior to entry into teacher preparation.

b. Student's abilities, skills, etcetera, at the start of training. (These are suggested areas of exploration some of which are still at a reasonably experimental stage as far as the development of data collection instruments.)

1) Measures of divergent and convergent thinking ability;

2) Measures of evaluative thinking ability;

3) Measures of behavioral cognition. (Guilford, 1959).

4) Conceptual level (or information processing abilities) of prospective teachers (Harvey, 1966).

c. Student attitudes, motivation, interest, at the start of training.

1) Motivation (Atkinson, 1966).

2) Flexibility (Rokeach, 1960).

3) Attitudes.

d. Additional Data on Students.

1) Selected Personal Experiences.

a) Work history: Is student working while going to College? Type of work.

b) Travel.

c) Data from Student File, Brooklyn College Planning System.

2) Knowledge of professional skills, for example, videotaping, opaque projection.

e. Examples of prospective teachers' responses to teaching situations at the start of their professional sequences: videotaped selections of teaching situations analyzed according to a teaching-learning scale.

2. Data Collected about Students at Specified Critical Points Throughout the Teacher Preparation Programs.

a. Knowledge learned in each course or module: course grades.

b. Content or skills learned in each course or module.

1) Instructional technology: skills and use.

2) Teaching-learning skills: divergent and convergent thinking, evaluative thinking, behavioral cognition, information processing abilities. (Guilford, 1959; Harvey, 1966; Rokeach, 1960).

c. Reactions toward content or skills learned in all courses.

1) This is an extension of the concept of triangulation (Haroutunian, 1968; Webb, 1966) which comes into play where no statistically significant difference has been obtained

at a given point of measurement in the program, but both undergraduate students and/or instructors and/or cooperating school personnel feel that significant learnings have taken place.

2) The undergraduate students (prospective teachers), instructors, cooperating school personnel, will be asked to submit a written reaction to the course or module or experience. The data collection forms for these particular responses will be devised by those charged with the responsibility for the evaluation of this program and working in cooperation with prospective teachers, instructors, cooperating school personnel.

3) Teaching Performance Data Collected from the First Supervised Instructional Experience Sequence through the Second Year of Teaching: Data Prior to Entry into Supervised Instructional Experience.

a. Knowledge.

1) Summation of College program up to the start of supervised instructional experience: Content and grades.

2) Achievement tests designed to measure knowledge deemed important by instructors of supervised instructional experience for success in that experience.

b. Performance on tests of teaching skill.

1) A standardized test of professional knowledge and skills.

2) A retesting with the videotapes referred to in 1-a. (above).

c. Attitudes, motivations, interests, prior to entry into supervised instructional experience: assessment of affective behaviors with the same measuring techniques used in 1.-c. to determine whether any change has occurred.

3. Teaching Performance Data Collected from the First Supervised Instructional Experience Sequence through the Second Year of Teaching: Data Collected during Teaching Experience.

   a. Videotapes of teaching: at stated intervals throughout the supervised instructional experience and into the second year of teaching. Videotapes will be made of performance. These tapes will be analyzed in terms of: (1) Content: logical teaching-learning styles (Smith, 1969); (2) Classroom behavioral environment (Flanders, 1968); (3) Non-verbal communication in the classroom situation.

   b. Student success as a criterion of teaching effectiveness: student success can be used as a criterion only if an efficient technique is developed to measure individual student improvement in terms of what can be expected of him, rather than total class improvement against some norm-referenced criteria.

   c. Attitudes, motivations, interests: A further exploration of changes in these affective domains as the student moves further into a teaching role.

4. Data Needed for Cost Effectiveness:

Cost effectiveness analysis has no relationship to planning the costs for curriculum implementation. A study of costs is used in an evaluation study to determine the adequacy of a teacher preparation program especially in terms of inputs versus effectiveness.

In assessing cost effectiveness of any new program, especially one such as the experience-centered curricula proposed in preceding sections of this document, it will be necessary to make a distinction between capital outlay costs (such as those required to establish the School-Community-Teaching-Learning Centers) and the ongoing costs of implementing programs.

a. Instructional staff.

1) Staff: category, salary, time, task.

2) Student-teacher ratio.

3) Mode of presentation of instruction by staff by category.

b. Teacher Preparation Equipment.

1) Equipment categorized under instructional technology: videotaping equipment, audiotaping equipment, materials for computer-assisted instruction (hardware), "audio-visual" devices, television equipment.

2) Cost of producing software: staff time (including professorial staff, systems personnel, and programmers) and equipment.

3) Cost of instructional time for in-service training of staff in the development of software for instructional technology and in the various uses of instructional technology.

c. School Plant: Physical facilities.

1) Campus Media Learning Center.

2) School-Community-Teaching-Learning Center.

D. Analyses of Data: Design and Statistical Techniques.

Campbell and Stanley (1967) referred to series of designs which may be used in analysis of data when evaluating experimental programs. However, the newer concept of "Program Free" mode of data analysis should not be overlooked when the purpose is to make comparative assessments of one or more programs of teacher preparation (Popham, 1968).

Some of the multivariate statistical techniques summarized by Tatsuoka and Tiedeman (1963) could probably be applied to any types of formal analysis

which would be used in connection with this evaluation.

E. Information Systems.

A sophisticated information retrieval system must be planned if any evaluation, even at the most elementary level, is to be made of the proposed curricula. The system should be compatible with the Brooklyn College Planning System now being developed by Education and Economic Systems, Inc. The Basic Indexing Retrieval System, (Vinsonhaler, 1968 and 1967) could be useful in preparing the sub-system for evaluation of these curricula.

The indexing system should be developed to permit cross-analysis of different aspects of the data. It should provide for adequate storage which would lead to rapid retrieval of needed information.

Adequate personnel, for example, systems analyst, programmers, should be assigned to the curriculum evaluation aspect of the information retrieval system.

F. Responsibility for Carrying Out the Evaluation Program.

The responsibility for detailed planning and implementation for the evaluation of the proposed curricula should rest with an Office of Testing and Research. Adequate professional staff, supported by research assistants and secretarial assistants, should be provided for this task. Further support should include adequate space and equipment appropriate for a research office.

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APPENDIX I

THE EARLY CHILDHOOD CENTER

The Early Childhood Program

The document which follows is intended to suggest a structure to implement certain aspects of the new curriculum in teacher education. It addresses itself specifically to an area in the preparation of teachers which has now become the concern of the entire nation, namely, the development of sound educational programs for young children below the age of six and the need for well-trained teachers to develop these programs. In its Position Paper No. 2, the Board of Regents has affirmed the New York State Department of Education's commitment to provide sound, individualized child-centered education for all 3-5 year olds in the State of New York, and calls upon teacher-training institutes to develop special programs to prepare teachers for this task.

Much of our failure to effect significant changes in the education of children in past years has been due to the lack of available educational settings demonstrating a developmental point of view, with individualized, child-centered programs, rich in the varieties of activities children can be encouraged to engage in, and imaginative in the endless possibilities afforded children to become active participants in their own education. Because of the lack of suitable alternatives, our college students have been forced to participate in rigid, overly-structured and confining settings that tended to stifle natural activity, imagination, and intellectual functions in children, and that offered no support or outlets for their emotional development. Our efforts to encourage college students to become innovative and institute significant changes in the education of children has not been effective in combatting the forces controlling the educational patterns in the city. It has become increasingly apparent that, in order to achieve significant changes in the educational scene, Brooklyn College must itself provide various types of models, which would both serve as demonstrations of effective education for all children, and as centers for the training of future teachers.

Early Childhood Education has always had as its major focus a total, integrated, child-development point of view. The young pre-school child is a member of a particular family, being reared, initially, in the culture of his family, and emerging at the age of 3 with a full history of specific experiences which, combined with his own genetic endowment, have already made significant contributions to his total development. This view of the developing child has been further supplemented by a vast growing body of contributions from a wide variety of sources on the nature of human development. We are particularly indebted to the fields of genetics, pediatric neurology, pediatric psychiatry, and lately, opthamology, for their contributions to our knowledge of the developing human organism. Anthropology, and sociology, have given us additional perspective on the child and his family in a cultural setting. Such major researchers as Piaget, Anna Freud, Biber and Murphy have refined for us specific intellectual and psychological

aspects of the developing child. Today, with the thoughtful work of Escalona, Mahler, Brody, and others, interest is turning to the study of infants and the effects of their particular environments upon their development. This vast body of information acquired from multi-disciplinary sources, assists the Early Childhood specialist in understanding the nature of development and in developing suitable ways of working with young children in the educative environment. The preparation for this specialty also entails the acquisition of a variety of special methodological approaches which are the tools of this discipline. It is now understood that educational services for young children require also services to, and participation by, the key persons responsible for him--his family. There is, therefore, a commitment made by the Early Childhood field that specialists in Early Childhood Education are partners with parents in the rearing and education of their children.

In New York City today, there are few facilities which fully understand and provide for the needs of young children.* Fewer still are the facilities which are also concerned with providing for the needs of the young child's total family. Social agencies, schools, hospitals, and parents recognizing these problems, have sought solutions for them by calling upon the Early Childhood Center of Brooklyn College for consultations, guidance, and educational assistance.

The lack of adequate facilities and services for young pre-school children and their families also makes it impossible to provide our college students with the necessary pre-service experiences which will assist them in developing skills and competencies in the Early Childhood area. The Early Childhood document, therefore, addresses itself in part to the possible ways of providing educational services desperately needed for children and their families and for the training of our own students. By extending the college into the community, students, under the joint guidance and supervision of specialists in a variety of area and the college staff, will receive unique training in the continuous study of the developing child within the context of his family, his culture group, and his community. Simultaneously, students will participate in offering much-needed services in all areas, over a sustained period of time.

The Early Childhood Center on campus will now be required to play an increasingly important function as a resource to the college and communities for information, for consultation, and for study. Utilizing its own experiences with normal and atypical children, innovations in integrating ages, cultures, coping and learning styles, its cumulative studies and acquired competencies in the application of specific methodological approaches, it will serve as a guide for the development of community-based centers. The Early Childhood Center has been called upon continuously to demonstrate the relationship of child-development theory to

*Heller, Barbara R. and Barrett, Richard S.
Expand and Improve---A Critical Review of the First Three Years of ESEA Title I in New York City --Published by The Center for Urban Education, New York City, July 1970---pages 59-67

educational practise. Serving as a model demonstrating sound educational approaches applicable for all children, it has the unique opportunity and obligation to continue to study the effects on development of varied educational approaches with normal and atypical children in an integrated child and family-centered environment. Through its direct connections with the community-based centers, the information it continues to gather from its multi-faceted activities will benefit an increasingly larger population.

The Early Childhood Center will continue its charge to serve course requirements of various departments, and guide and stimulate college-based activities for study and research.

In the light of the new curriculum, the statement which follows summarizes a view of the possibilities in the future for the development of off-campus or community-based Early Childhood Centers and the Early Childhood Center on campus.

1. Child Development Centers (Off Campus)

In the community-based facilities, several types of family needs can be met within an Early Childhood, or Child Development, complex. While rendering educational services to meet children's needs, the total family unit can be included, and provided for where necessary.

An integrated, team approach, is considered necessary to service the needs of the Child Development complex. The team would include medical and nursing personnel, social workers, teachers, and parents.

It is understood that students will be active participants in every type of service offered within the complex, working together with the professional team, the college instructors, and the parents and families of the children served.

A. Services to children and their families

1. Child-Care Centers--for working mothers or mothers unable to care for their children during the day. These centers would be open from 8:00 A.M. to 6:00 P.M. and serve children from infants---where necessary---through age 5. These programs could be funded by the Department of Social Services of New York City but operated and supervised by Brooklyn College.

2. In some communities it might be possible to also develop a Parent-Cooperative Pre-School within the complex. Here, parents who have time and interest would carry considerable responsibilities for operating the school, but undoubtedly would require financial assistance. Brooklyn College would serve as a supportive, educational guide to the parent board and staff.

3. After School Centers--to serve all children ages 6-9 whose parents wish them to attend. These centers would offer children lunch where necessary or desired, and provide them with suitable programs from 2-6 P.M. Such programs could be funded by Social Services and/or the Board of Education but would be operated and supervised by Brooklyn College.

4. Center-Based Family Day-Care service would provide a facility where entire families, including the elderly and infirm family members, might spend the day, or any part of it, caring for their own children, contributing, if they desired and were able to do so, to any of the other programs in the complex.

B. Programs for children and their families will benefit from the developments in educational approaches identified at the college-based Early Childhood Center. Among the most important of these are the following:

1. Mixed ages for the preschool and school age groups.
2. Small groupings.
3. Normal and atypical children together.
4. Parent involvement in all degrees in the children's programs.
5. Individualized teaching wherever and whenever indicated.
6. Continuous parent consultation available.
7. Collaborative participation with special agencies ex: Rusk Institute for Rehabilitation Medicine, hospital clinics, etc.
8. Community and community people to be used as a resource--stores, factories, transportation, hospitals, service people, etc.

C. Facilities Needed for the Complex

1. Infant, toddler, and pre-school children's rooms and protected outdoor facilities.

2. Large workshops for parents, children, students, and teachers, so that all equipment can be designed, improvised, or constructed in these workshops, including furniture.

   a. Parents in the community, or members of families, may construct their own furniture--or other desired things--for the home, or personally. (encouraging self help and providing for creative outlets)

   b. Equipment for children may be designed and constructed by all interested persons in the workshop. The workshop will also be used for repairing objects that require it--for either school or home.

3. Large kitchens--for parents, teachers, children, and students--to participate in making nutritious meals, or simply to enjoy cooking or baking, or trying out recipes. These will also be used for preparing cultural or community festivities.

4. Fully-equipped sewing rooms--to make clothing, items for the home, for school, or altering and repairing.

5. Meeting rooms for students, parents, and professional staff, small conference rooms, and medical rooms.

6. "Reproductions" room--for communications in various media--including the possibilities for developing a local newspaper--if desired.

7. Arts and crafts rooms for pursuing other interests--potting, weaving, painting--again to be available to parents, teachers, students, and children.

II. The Early Childhood Center (On Campus)

It is expected that the Early Childhood Center on campus will continue to provide an educational service, instructional opportunities, research possibilities, and guidance and consultation to all who request it. When the off-campus School-Community Teaching-Learning Centers are established, the current services offered by the Early Childhood Center will, of necessity, be augmented. In order to guide the growth and development of the community-based centers, the Early Childhood Center will expand its own activities in a variety of ways and develop programs consistent with the new conception of the relationship between the college and the community.

A. Continued Services

1. To continue to serve as a study laboratory for on-campus students in all departments.

2. To continue to serve local communities as a demonstration of the relationship of child development theories to methodological approaches which best serve each child.

3. To continue to serve as a resource and consultation center for public schools, private schools, parochial schools, and other agencies--Head Start, hospital schools, etc., parents everywhere, other teacher-training institutes, and all others concerned with young children.

4. To continue to explore the possibilities for integrating normal and atypical children in an educative environment.

B. Projected Plans

1. To serve graduate programs in offering research possibilities such as:

   a. Follow-up longitudinal studies of children formerly served by the Early Childhood Center.

   b. Comparative studies in methodological approaches utilizing the Center's and other approaches to education of young children (Montessori, Engleman and Bereiter, etc.).

   c. Studies of the effects of integrated grouping on atypical children.

2. To give assistance to persons or agencies who are planning to establish children's centers in various agencies--including colleges, businesses, hospitals, etc.

3. To participate in the preparation of "para-professionals" in early childhood education.

4. To serve as a base for citywide consultation services--for parents, teachers, and others interested in young, developing children.

5. To develop films to be used for distribution to professional groups, for training purposes, and for parents. These films would be developed with the assistance of the Campus Media Learning Center, and the T.V. Center. They would be concerned with the following:

   a. The relationship of development to the educative environment.

   b. A three-year study of two normally-developing children, demonstrating coping resources, behavioral styles, and critical periods in development--utilizing both the home and the school environment.

   c. A study of atypical children, their functioning patterns, and the adaptations made for them in the school environment.

6. To gather information on current practices in rearing and educating children in other cultures--African countries, Middle Eastern countries, Northern, Central, and Southern European countries, and Far Eastern countries.

III. Relationship Between On-Campus Early Childhood Center and Affiliated Off-Campus Centers

The functional relationship of the Early Childhood Center to the total Teacher-Training program and to the Community Child Development complex will provide for the following:

1. Research data initiated and gathered at all centers will be centrally organized and prepared for dissemination. Such research might include:

   a. Nutrition and its effects on the newborn, the developing young child, the intellectual functions, etc.

   b. Implications of early mothering (or child rearing) patterns for later development and for education.

   c. Longitudinal studies of children of various cultures.

   d. Comparative studies of child-rearing practices in various cultures in Brooklyn.

e. Studies of adaptations of new arrivals to life in Brooklyn.

2. Observations will be offered on campus at the laboratory school.

3. Information and guidance will be offered by the campus laboratory school to community-based centers.

4. Consultation to all groups of parents will be offered on campus as requested.

5. Continuous in-services seminars for teachers for all community-based centers will be held at the Early Childhood Center on campus.

6. Cumulatively gathered information on young children will be based at a central Early Childhood library on campus--including: films, records, data gathered on family life styles, methodological approaches, studies and information on special programs for atypical children, Early Childhood conference proceedings, etc.

7. A series of seminars will be offered on campus. These might be concerned with, for example:

   a. Developing educational services and opportunities in New York City and include joint participation by various groups--Afro-Americans, Puerto Rican Alliance, Chinese, Japanese, Italian Americans, Judaic representatives, etc.

   b. Presentations of current research on:

      1. Infant development (Escalona).

      2. The effects of early mothering patterns on the developing child (Brody).

   c. The problems of rearing children in today's world.

8. Joint studies--in on and off-campus schools and communities, by students and others, on the prevention of disorders in young children, and considering such issues as:

   a. The effects of drugs on the developing child.

   b. The effect of the mobile family on child development.

   c. One-parent family.

   d. Pre-school intervention.

   e. Effects of emerging practices in rearing and educating young children on the integration of affective and cognitive realms.

APPENDIX J

THE EDUCATIONAL CLINIC PROGRAM

THE EDUCATIONAL CLINIC PROGRAM

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THE EDUCATIONAL CLINIC PROGRAM

1. Introductory Note

Members of the Educational Clinic Staff, by virtue of their clinical and educational training and experience, are qualified to serve the department in a variety of ways, and have done so over the years. This statement seeks to do the following:

a. Set forth, in a general way, the representative roles that the clinician can fill.

b. Note the services that the clinic can render to the various courses which make up the undergraduate sequence of the proposed teacher education program.

2. Representative Roles of the Clinician

There are many ways in which a clinician, seeking to contribute to teacher education, can spend his time. The following represents some of the ways in which the Educational Clinic staff has served:

a. The Demonstration Program: Through the use of clinical tests and procedures, the staff has demonstrated methods of child study; developmental irregularities in children; cognitive style of youngsters; comparative developmental levels of children of varying ethnic origin; interview of parents, etc.

b. The Diagnostic Program: Through the administration of appropriate clinical test batteries, augmented by social, pediatric, and psychiatric data, the staff has arrived at a differential diagnosis of the behavior and adjustment of referred children - dull, average, bright, retarded, organically impaired, academically retarded and disadvantaged, emotionally disturbed, socially disruptive, etc. Parents, children, school personnel, and students - in varying ways and degree - have been involved in the studies and have profited from them. At appropriate times, and for obvious reasons, we have had selected intake, accepting youngsters from the following programs: More Effective Schools, Early Identification Program, Intellectually Gifted Children, Junior Guidance, and 600 Schools.

c. The Therapy Program: Over the years the clinic has carried on individual therapy with selected cases - parents and children who have benefited from the involvement. Therapeutic experience has been helpful in refining diagnostic insights and has provided the data for follow-up discussion with students in the undergraduate as well as graduate division.

Operating at the district level should make it easier to obtain individuals for group demonstrations. Involvement in group therapy and family therapy represent next steps in program development.

d. The Remedial Education Program: Remedial education has been provided for selected cases of learning disability. In some instances, staff members were directly involved in the remedial process. More typically, selected graduate students, chosen from appropriate courses, were provided with the opportunity to do remedial work under supervision of clinic staff. Such graduate students then reported in class on their cases - thus sharing their clinic experience with their colleagues. Mothers of children receiving remedial tutoring were seen in the clinic in adjunctive therapy. Periodic contact was maintained with appropriate school personnel during the course of a youngster's involvement in remedial instruction.

e. The Supervision Program: Selected graduate students in the School Psychology program have been assigned to the clinic for their field training and experience. Comprehensive supervision of these students has been provided by clinic staff. Clinic staff has also provided supervision of students assigned to the clinic's remedial education program. Over the years, clinical assistants and fellows appointed to the clinic have been assigned to senior staff members for supervision.

f. The Group Process Program: For the past two years, clinic members have served as leaders of sensitivity groups, made up of students. Exploratory experiences were undertaken, initially in the Ed 50's and subsequently in the Ed 20's. The two types of experience differed from each other in a number of ways - organization of the group, frequency of contact, number of sessions, etc. The clinic staff has also conducted theme-centered workshops in the Ed 50's. Opportunities have been provided for theme-centered workshops in such areas as Discipline, Behavior Problems of Children, Learning Problems of Deprived Children, Personality Interaction of Teachers and Pupils, etc.

g. Consultant Activity: Clinic staff has been consulted by department members and students for a variety of purposes. Clinic staff has been invited to undergraduate and graduate courses to present material and lead discussion in clinical and educational areas of a technical nature. Clinic members have been made available to accompany Ed 50 instructors for joint school visitation. The co-visit consultation serves a variety of purposes, i.e., supplementary observation and appraisal of student teachers, gaining increased insight into the dynamics of certain classrooms, helping student teachers to identify and understand, clinically, the special problems of

individual children, etc. Clinic staff members have also been assigned to campus schools, in which they have rendered a variety of clinical and educational consulting services.

h. Research Activity: In order to facilitate the selection of cases for research, an instrument was developed for the coding of clinic cases. All cases studied by the clinic are coded. In cooperation with the Educational Clinics of City College, Hunter College, and Queens College, the Brooklyn College Educational Clinic participated in a pilot research project concerned with the clinical study of normal children at different age levels. In addition, the clinic staff initiated and conducted a number of research projects, as follows: Characteristics of a Psychotherapeutically Oriented Group for Beginning Teachers; A Project to Investigate Various Correlates of Remedial Instruction at the Junior High School Level; and a Follow-up Study of Children Diagnosed as Schizophrenic or Suspected Schizophrenic. Increased student participation in the clinic (especially graduate students) should result in greater utilization of the clinic files for research.

i. Community Activity: For years, the clinic was a member of the Brooklyn Council for Social Planning. The clinic maintained contact with community agencies, in the interest of the child and his family, for example, department of public welfare, hospitals, family agencies, placement agencies, recreational settlements, camps, etc. Teachers and supervisors were kept informed of existent community resources and agencies, and their cooperation was solicited in efforts to expand community facilities when they were deemed inadequate to serve the needs of children.

j. The Instructional Program: The clinic staff has participated in the instruction program of the department in a number of ways, as follows: Member of an Instructional Team; Instructor assigned to a course (usually graduate, but at times undergraduate); and Development of Instruction Materials (test file, illustrative case materials re-written for class use, role-played interviews for class use). In addition, over a three year period of time, the staff of the clinic initiated and conducted a series of seminars for department members and interested college personnel. The clinic staff has also been involved in the development of department programs, e.g., School Psychology Program, Training of Teachers for the Emotionally Disturbed, etc.

3. Services that the Clinic Can Render Undergraduate Courses of the Proposed Teacher Education Program

The services that the clinic will be requested to render the undergraduate courses of the proposed teacher education program will un-

doubtedly vary from school district to school district. This variation will be due, in part, to the divergent problems, needs, and characteristics of the different school communities, as well as the divergent policies and practices of different instructional teams - and instructional personnel unaffiliated with a team. In view of the foregoing, the list of services which follows is representative only, leaving room for the requests that may originate at the district level:

a. For Courses: Children and Youth in Schools in an Urban Environment, and Child Development

(1) Interview by a clinic member of a heterogeneous group of children - approximately 6 - representative of different characteristics of the community. With younger groups (for students in the Nursery through Grade 2) play can be substituted for interview. In the discussion following the demonstration, students can be motivated to conduct field studies of the community in order to establish the following: Population distribution in the community; racial and religious distribution; school population and community schools; socio-economic, occupational, and educational levels of community population; housing needs; welfare facilities; hospitals; mental health facilities; social agencies; recreational facilities, etc.

(2) Clinic member can observe students assigned to work with children in community agencies. Supervision can be provided directly to the students and/or observations can be used as basis for classroom discussion of interpersonal relations in the group and related dynamics.

(3) Interview by a clinic member of a small group of parents. This can be used to evaluate parental awareness of needs of the community, of their views of the schools, and of their understanding of the social agency structure of the community, etc.

(4) Clinic staff Pediatrician can meet with the college staff and/or cooperating teachers and/or students of a given community to discuss common pediatric problems of given age groups and the medical needs and resources of the community.

(5) Through the use of clinical tests and procedures, and/or classroom visitation and observation, the staff can demonstrate the following:

(a) Methods of child study

(b) Developmental irregularities in children

(c) Cognitive style of youngsters

(d) Affective style and coping mechanisms of youngsters

(e) Comparative developmental levels of children of varying socio-economic levels and/or ethnic groups

(f) Open-ended interview of peer groups

(g) Interview of parents

Each of the foregoing represents an area in which a special demonstration can be planned. Classroom discussion led by the clinic staff member will be arranged as a follow-up to the observed demonstration.

(6) Clinic staff members will serve as leaders of student groups organized to provide sensitivity training. This experience initiated at the beginning of the teacher training program (roughly speaking at the sophomore level) will continue to be made available to students throughout the undergraduate program (at both the junior and senior levels). The content and conduct of the program will be designed to help students to become aware of their feelings and attitudes (e.g., self-awareness, insight, and self-understanding) and the implications of these characteristics for others in different group settings. In addition, through the sensitivity experience, students should develop increasing perception of interpersonal reactions in the group as well as group interaction patterns. The sensitivity training program, when fully developed, should provide an integrated affective experience in the training of teachers; as such it should contribute immeasurably to the understanding of children and the educative process.

b. <u>For Courses: Learning Area</u>

(1) Arrange for students to observe different classroom and school settings for adapting curriculum, instructional methods, and classroom procedures to the learning and behavioral needs of the individual child and/or different categories of children, i.e., regular classes, Children with Retarded Mental Development, Intellectually Gifted Children, More Effective Schools, Early Identification Program, Open Corridor Schools, etc. Following the visitation, a clinic staff member can lead a workshop concerned with the historical background of educational efforts to individualize instruction, and the educational and psychological characteristics of representative current programs.

(2) Demonstrate a youngster with a learning disability. In the demonstration, the clinician will utilize a sampling of appropriate clinical tests customarily employed in making a psycho-diagnostic appraisal of a child. In the follow-up discussion of the demonstration, the clinic staff member or members can bring in related social, pediatric, and psychiatric data and can explore, with the students, the multiple causative factors involved in children with learning disabilities; and, also, the importance of having remedial and/or therapeutic recommendations bear relationship to the etiology of the condition.

(3) A clinic staff member can accompany an instructor on a school visit to observe students involved in tutoring small groups and/or small group instruction, within the classroom, conducted by a cooperating teacher. In a follow-up conference, the clinic staff member may be in a position to offer clinical insights in identifying and understanding special problems of some of the observed youngsters. Also, in the discussion, the role of the student-tutor and/or classroom teacher and the effectiveness of the remedial materials used can be explored.

(4) A clinic staff member can interview a small group of parents (observed by a class of students), exploring with them their attitudes towards the community's schools, how they feel about the education their children are receiving, how they feel about the progress their children are making, and what they consider to be the educational problems of the community.

(5) Students will continue to receive sensitivity training, with a clinic staff member acting as a leader of the group.

c. <u>For Courses: Student Teaching Area</u>

(1) Observation by a clinic staff member of a student-teacher in a teaching situation. The clinician might accompany the instructor of the course or might be doing the observation alone. The clinician's observation would serve a number of purposes, as follows: To observe the interaction between the student-teacher and the children; between the student-teacher and the cooperating teacher and any other school personnel with whom she would be interacting; to observe the interaction of the children in the class. Following the observation, the clinician could have a conference with the student-teacher and the instructor (with or without the cooperating teacher), and/or a group conference with several of the student-teachers who were observed.

(2) Clinic staff members can be made available to conduct theme-centered workshops with student-teachers. The themes should be the choice of, and agreed upon, by the students and the supervising instructors. Theme-centered workshops can be conducted within such areas as Discipline, Behavior Problems of Children, Learning Problems of Deprived Children, Personality Interaction of Teachers and Pupils, Sex Education, Drugs, etc.

(3) Demonstration of a case conference (involving a youngster seen in demonstration) attended by the various clinic disciplines as well as the student-teacher, supervisor, cooperating teacher, and administrative representative of the school. Students should acquire the facility to interpret clinical reports and to develop techniques for implementing report recommendations.

(4) Students will continue to receive sensitivity training, with a clinic staff member acting as leader of the group.

4. Concluding Note

As noted earlier in this presentation, the list of services identified with the different courses is suggestive only. This plan may very well undergo modification at the hands of the clinic staff, the curriculum committee, and the department as it is lived with and applied. Conceivably, the clinic, in addition to the foregoing or in replacement of part of it, may be requested to organize special courses in any of a number of areas, e.g., dynamics of the classroom, seminar in sensitivity training, the training of para-professionals, etc. Experience with the program and the overall teacher education program will form the basis for any revision that becomes necessary.

One item is abundantly clear. The foregoing program and any extension of it will require an increase in clinic personnel - how much it is not possible to state at present. Time and experience will tell.

A P P E N D I X K

SPECIAL EXPERIMENTAL PROGRAM

EARLY CHILDHOOD

Proposed Experimental Undergraduate Course Sequence for the Preparation of Teachers in Early Childhood Education (Nursery through Grade 2)

Brief Introduction:

The Experimental Program is recommended for a small group (25-30) of selected students. While this program is regarded as desirable for all prospective teachers in the Department of Education, it is offered to a limited number of students for the following reasons:

1. Extensive commitments by both students and faculty.
2. The need for specialized staff.
3. Complexities of administering the program.
4. The experimental nature of the program.

Unique Features:

In addition to all of the new features presented in the general proposed Curriculum in Early Childhood Education (i.e., experience-centered, combined theory and practice, team teaching, electives, flexible seminars, modules, block scheduling, etc.) the experimental program has a number of additional dimensions:

A. A colloquium each semester that establishes individualization of the student's program, personalization and overall coherence of his educational experiences. The colloquium leader will be a clinical psychologist, social worker, or other professional qualified to supervise and instruct in complex human relationships.

B. A mentor program in which the Brooklyn College student adopts one child from the School-Community Teaching-Learning Center for the establishment of an intensive relationship over a two year period. The relationship will be supervised by the colloquium leader, so that it develops at an appropriate pace consistent with the student's interests, abilities, skills, and maturity. Minimally, it will be a tutorial relationship, but hopefully it will extend to other functions with the child and his family. Thus, the student will be able to see the school and community from the perspective of many roles while providing valuable service.

C. Programming (including summers for college credit), on an individual basis, of life experiences outside the academic and experiential coursework that are deemed significant by both the student and colloquium leader for the student's maturation and development.

D. A community residence experience during the comprehensive teaching semester in which the student lives with a cooperating family in the local community.

E. A continuous case seminar in which students can present concrete problems that arise in their various experiences to the entire staff of the program. Thus, real problems can be worked on in a truly interdisciplinary manner in a setting in which all participants are actively involved.

F. A "small college" concept in which students and faculty form a closely knit group that remains intact for the five semesters of the program.

G. A pass/fail system of grading that emphasizes levels of mastery. Students will be required to continue work on the various modules until the goals, specified and agreed upon by the student, instructors, and colloquium leader, are achieved.

SUMMARY: EXPERIMENTAL EARLY CHILDHOOD SEQUENCE (Nursery through Grade 2)

Course Number	Title	Semester	Credits	Laboratory Experiences (in School-Community Teaching-Learning Centers and/or Campus Media Learning Center)	Staff
41.X	Young Children in the Urban Environment: School and Community.	Lower Sophomore	4 credits: (2 class and 4 lab. hours).	Group project; assessing teaching behavior; Instructional Technology; observation and participation in classrooms; involvement with community agencies and groups.	Teams to be selected from Specialists in Sociology-Anthropology, Philosophy, Psychology, Methods, Instructional Technology; Cooperating Personnel from schools; Consultants from other departments and the communities.
42.X	Colloquium I	Lower Sophomore	1 credit: (2 hours of individual and group meetings.	Self examination; group awareness; sensitivity training; individualized programming of experiences; selection of child for intensive relationship.	Clinical Psychologist, Social Worker or other qualified clinical professional.
43.X	Child Development and the Teaching-Learning Process.	Upper Sophomore	8 credits: (4 class and 6 lab. hours).	Study of two children; classroom observation and participation; use of media (e.g. teaching machines); visits to community early childhood facilities.	Educational Specialists in Psychology and Methods.
42.1X	Colloquium II	Upper Sophomore	1 credit: (2 hours of individual and group meetings.	Self examination; group awareness; sensitivity training; intensive relationship with child from School-Community Teaching-Learning Center.	Clinical Psychologist, Social Worker, or other trained clinical professional.
44.X	Individualized Summer Experience I.	Summer Session	2 credits	Experiences selected by student in conference with Colloquium leader (e.g. travel, work in factory, volunteer in community program, summer camp, study at another university, etc.).	Supervised by Colloquium leader.
43.X	Teaching Focus on Small Group and Individual Instruction.	Junior Year (both semesters).	14 credits (2 class and 12 lab. hrs.)	Classroom observation and participation, preparation of curriculum materials; use of media (e.g. video-tape, overhead projector, etc.); micro-teaching; tutoring	Educational Specialists in Methods and Psychology.
42.2X	Colloquium III	Junior Year (both semesters).	2 credits: (2 hours of individual and group meetings.	Self-examination; group awareness; sensitivity training; intensive relationship with one child.	Clinical Psychologist, Social Worker or other qualified clinical professional.
44.1X	Individualized Summer Experi-	Summer Session	2 credits	Experiences selected by student in conference with Colloquium	Supervised by Colloquium leader.

[illegible]	[illegible]	Sophomore	(2 hours of individual and group meetings.	sensitivity training; intensive relationship with child from School-Community Teaching-Learning Center.	Social Worker, or other trained clinical professional.
44.X	Individualized Summer Experience I.	Summer Session	2 credits	Experiences selected by student in conference with Colloquium leader (e.g. travel, work in factory, volunteer in community program, summer camp, study at another university, etc.).	Supervised by Colloquium leader.
43.X	Teaching Focus on Small Group and Individual Instruction.	Junior Year (both semesters).	12 credits (4 class and 24 lab. hrs.)	Classroom observation and participation; preparation of curriculum materials; use of media (e.g. video-tape, overhead projector, etc.); micro-teaching; tutoring	Educational Specialists in Methods and Psychology.
42.2X	Colloquium III	Junior Year (both semesters).	2 credits: (2 hours of individual and group meetings.	Self-examination; group awareness; sensitivity training; intensive relationship with one child.	Clinical Psychologist, Social Worker or other qualified clinical professional.
44.1X	Individualized Summer Experience II.	Summer Session	2 credits	Experiences selected by student in conference with Colloquium leader (see Individualized Summer Experience I - 44.X).	Supervised by Colloquium leader.
46.X	Seminar and Comprehensive Teaching in Early Childhood Education.	Lower Senior	12 credits: (4 class and 24 lab. hrs.)	Selected supervised instructional experiences; use of media to study and develop teaching styles (video-tape); assessment of teaching effectiveness.	Teams to be selected from Specialists in Sociology-Anthropology, Philosophy, Psychology, Methods, Instructional Technology, Cooperating Personnel from schools, Consultants from communities and other college departments.
42.3X	Colloquium IV	Lower Senior	1 credit: (2 hours of individual and group meetings.	Self-examination; group awareness; sensitivity training; intensive relationship with child from School-Community Teaching-Learning Center; evaluation of personality and emotional factors in professional teaching.	Clinical Psychologist, Social Worker, or other trained clinical professional.

Total 47 credits

Experimental-Early Childhood

Lower Sophomore Semester
Catalogue Description

I. Catalogue Entry

a. Education 41.X

b. Young Children in the Urban Environment: School and Community

c. 4 credits: 6 hours class and laboratory (2 class and 4 laboratory hours).

d. Analysis of forces affecting education of young children in an urban environment; examination of formal and informal organizational patterns of early childhood education; study of models for assessing teaching behavior and classroom interaction.

Laboratory Experiences: Students will explore with the colloquium leader and instructor needed school-community experiences. Experiential programming will be individualized. Group-selected project to be carried out in the school-community setting; guided observation and participation in School-Community Teaching-Learning Centers and the Campus Media Learning Center, with special emphasis on Nursery through grade 2.

e. Prerequisites: Permission of the chairman of the department; only open to students who have been accepted into the Experimental Program in Early Childhood Education.

Corequisite: Education 42.X

f. Exclusion clause: Not open to students who are enrolled in or who have completed Education 27.1, 28, 29.5, 30.3, 30.4, 35, 40.X, 50X, 55X, 60X.

II. Catalogue Entry

a. Education 42.X

b. Colloquium I

c. 1 credit: 2 hours of individual and group meetings

d. Individual and group conferences for helping the student clarify his goals, values and needs. Development of self-awareness and awareness of group processes. Individual programming of experiences. Selection of child for 2-year relationship (mentor program).

e. Prerequisites: Permission of the chairman of the department; only open to students who have been accepted into the Experimental Program in Early Childhood Education.

Corequisite: Education 41.X

Experiential - Early Childhood

Upper Sophomore Semester

III. Catalogue Entry

a. Education 43.X

b. Child Development and the Teaching-Learning Process

c. 8 credits: 10 hours class and laboratory (4 class and 6 laboratory hours).

d. Biogenetic and environmental factors in human behavior. The study of individual development and learning with major emphasis on the early childhood years. Application of concepts and theories of learning to the teaching-learning process. A study of the function of play in the developmental process; the teacher's role and the assessment of play in the school setting.

Laboratory Experiences: Guided comparative study of two children from different environments, one of whom will be the child selected for an intensive relationship. Through classroom observations and participation, the student will examine child development and learning in an educational environment. Selected activities in the teaching-learning process. Use of the Campus Media Learning Center.

e. Prerequisites: Education 41.X and 42.X

Corequisite: Education 42.1X

IV. Catalogue Entry

a. Education 42.1X

b. Colloquium II

c. 1 credit: 2 hours of individual and group meetings

d. Continuation of the colloquium. Use of sensitivity and group dynamics techniques to help students develop as mature and insightful adults. Supervision of relationship between Brooklyn College student and child from the School-Community Teaching-Learning Center.

e. Prerequisites: Education 41.X and 42.X

Corequisite: Education 43.X

Summer Session

V. Catalogue Entry

a. Education 44.X

b. Individualized Summer Experience I

c. 2 credits

d. Based on conferences with the colloquium leader, the student will select a summer experience aimed at broadening his horizons and stimulating his personal development (e.g. working in a factory, summer camp, community program, study at another university, travel, etc.).

e. Prerequisites: Education 41.X, 42.X, 43.X, 42.1X

Junior Year Semesters (Both)

VI. Catalogue Entry

a. Education 45.X

b. Teaching-Focus on Small Group and Individual Instruction

c. 14 credits: 20 hours class and laboratory (8 class and 12 laboratory hours; 7 credits each semester -- one-year course).

d. Analysis of theoretical and methodological approaches in teaching all the content areas of early childhood education (reading and language arts, creative arts, social studies, mathematics, science). Planning, guiding, and evaluating selected aspects of teaching all content areas to individuals and small groups in the School-Community Teaching-Learning Centers.

e. Prerequisites: Education 41.X, 42.X, 43.X, 42.1X, 44.X

Corequisite: Education 42.2X

VII. Catalogue Entry

a. Education 42.2X

b. Colloquium III

c. 2 credits: 2 hours of individual and group meetings (one year course).

d. Continuation of the colloquium

e. Prerequisites: Education 41.X, 42.X, 43.X, 42.1X, 44X

Corequisite: Education 45X

Summer Session

VIII. Catalogue Entry

a. Education 44.1X

b. Individualized Summer Experience II

c. 2 credits

d. Based on conferences with the colloquium leader, the student will slect a summer experience aimed at broadening his horizons and stimulating personal development.

e. Prerequisite: Education 44.X

Lower Secior Semester

IV. Catalogue Entry

a. Education 46.X

b. Seminar and Comprehensive Teaching in Early Childhood Education

c. 12 credits: 28 class and laboratory hours (4 class and 24 laboratory hours).

d. Seminar and supervised teaching in Early Childhood Education, Nursery through grade 2. Designed for further development of individual teaching style and of competence in the complex, integrated functions of teaching. Reassessment of professional goals and behaviors (cognitive, affective, social) in terms of value systems and philosophical positions.

e. Prerequisites: Education 41.X, 42.X, 43.X, 42.1X, 44.X, 45.X, 42.2X, 44.1X
Corequisite: Education 42.3X

X. Catalogue Entry

a. Education 42.3X

b. Colloquium IV

c. 1 credit: 2 hours of individual and group meetings

d. Continuation of the colloquium

e. Prerequisites: Education 41.X, 42.X, 43.X, 42.1X, 44.X, 45.X, 42.2X, 44.1X.
Corequisite: Education 46.X